THE ACADEMIC GREGORIES

BY AGNES GRAINGER STEWART

FAMOUS
·SCOTS·
·SERIES·

M
8353

22502732273

WELLCOME
LIBRARY
General Collections
M
8353

THE ACADEMIC GREGORIES

FAMOUS SCOTS SERIES

THOMAS CARLYLE. By Hector C. Macpherson.
ALLAN RAMSAY. By Oliphant Smeaton.
HUGH MILLER. By W. Keith Leask.
JOHN KNOX. By A. Taylor Innes.
ROBERT BURNS. By Gabriel Setoun.
THE BALLADISTS. By John Geddie.
RICHARD CAMERON. By Professor Herkless.
SIR JAMES Y. SIMPSON. By Eve Blantyre Simpson.
THOMAS CHALMERS. By Professor W. Garden Blaikie.
JAMES BOSWELL. By W. Keith Leask.
TOBIAS SMOLLETT. By Oliphant Smeaton.
FLETCHER OF SALTOUN. By G. W. T. Omond.
THE "BLACKWOOD" GROUP. By Sir George Douglas.
NORMAN MACLEOD. By John Wellwood.
SIR WALTER SCOTT. By Professor Saintsbury.
KIRKCALDY OF GRANGE. By Louis A. Barbé.
ROBERT FERGUSSON. By A. B. Grosart.
JAMES THOMSON. By William Bayne.
MUNGO PARK. By T. Banks Maclachlan.
DAVID HUME. By Professor Calderwood.
WILLIAM DUNBAR. By Oliphant Smeaton.
SIR WILLIAM WALLACE. By Professor Murison.
ROBERT LOUIS STEVENSON. By Margaret Moyes Black.
THOMAS REID. By Professor Campbell Fraser.
POLLOK AND AYTOUN. By Rosaline Masson.
ADAM SMITH. By Hector C. Macpherson.
ANDREW MELVILLE. By William Morison.
JAMES FREDERICK FERRIER. By E. S. Haldane.
KING ROBERT THE BRUCE. By A. F. Murison.
JAMES HOGG. By Sir George Douglas.
THOMAS CAMPBELL. By J. Cuthbert Hadden.
GEORGE BUCHANAN. By Robert Wallace.
SIR DAVID WILKIE. By Edward Pinnington.
THE ERSKINES, EBENEZER AND RALPH. By A. R. MacEwen.
THOMAS GUTHRIE. By Oliphant Smeaton.
DAVID LIVINGSTONE. By T. Banks Maclachlan.
THE ACADEMIC GREGORIES. By Agnes Grainger Stewart.
JOHNSTON OF WARRISTON. By William Morison.

THE ACADEMIC GREGORIES

BY

AGNES GRAINGER STEWART :

FAMOUS
·SCOTS·
·SERIES·

PUBLISHED BY
OLIPHANT ANDERSON
& FERRIER·EDINBVRGH
AND LONDON

The designs and ornaments of this volume are by Mr Joseph Brown, and the printing is from the press of Messrs Turnbull & Spears, Edinburgh.

April 1901

W[illegible]rary
fo[illegible]tory
and [illegible]standing
of [illegible]ine

PREFACE

As far back as I can remember there hung in my father's study two prints, the one a mezzotint of Professor James Gregory, and the other, inferior as a picture, but most beautiful in its subject, an engraving of William Pulteney Alison.

In answer to nursery enquiries as to the stories belonging to these two pictures, there had always perforce to be some dark facts related in connection with Dr James Gregory, but these were kept rather in the background, and the impression we got of him came nearer to the incidental portrait which Robert Louis Stevenson draws of him in 'Weir of Hermiston.' With William Pulteney Alison we could, as it were, shake hands, for the story teller could here insert a piece of real history, of how, long ago, this man had sat beside his crib watching over him, holding him back from the arms of Death. We watched with him as he sat there ministering to this sick child, keeping alive the little flicker of life, keeping the little restless body still. 'If he moves, he will faint,' Professor Alison had said. 'If he faints, he will die.' Across the gap of years other children held their breath till the little patient fell asleep.

But the most interesting fact about Gregory and Alison to us as children was that they had both been professors of the Practice of Physic in Edinburgh University, and

the little boy who had so nearly died now lectured in the place of the physician who had saved his life.

This early acquaintance gave me a love for these professors, and when I came to be asked to write a book upon the Academic members of the old Scottish family of Gregory, two of them at least were familiar as friends.

In the preparation of my book I have received much kindness, and I should especially like to thank Mr Philip Spencer Gregory, of Lincoln's Inn, Barrister-at-Law, late Fellow of King's College, Cambridge, for the help which he as a representative of the family was able to give me, and also for his very interesting 'Records of the Family of Gregory.' My thanks are also due to Professor Campbell Fraser for personal introduction to sources of information, to Mr Turner, Savilian Professor of Astronomy in the University of Oxford, and to Mr Henry Johnstone of the Edinburgh Academy and Mr R. S. Rait, Fellow of New College, Oxford, who have read my proofs. I must also record my debt of gratitude to the Editors for the great kindness and courtesy they have shown to me.

AGNES GRAINGER STEWART.

CONTENTS

PAGE

CHAPTER I

THE GREGORIES 9

CHAPTER II

DAVID GREGORIE OF KINAIRDY, 1625-1720 . . 19

CHAPTER III

JAMES GREGORIE, 1638-1675 27

CHAPTER IV

DAVID GREGORY, 1661-1708 52

CHAPTER V

DAVID GREGORY, 1696-1767 77

CHAPTER VI

(1) JAMES GREGORIE, 1666-1742; (2) CHARLES GREGORIE, 1681-1739; (3) DAVID GREGORIE, 1712-1765 . 84

CHAPTER VII

(1) JAMES GREGORIE, 1674-1733; (2) JAMES GREGORIE, 1701-1755 92

CHAPTER VIII

JOHN GREGORY, 1724-1773 100

CHAPTER IX

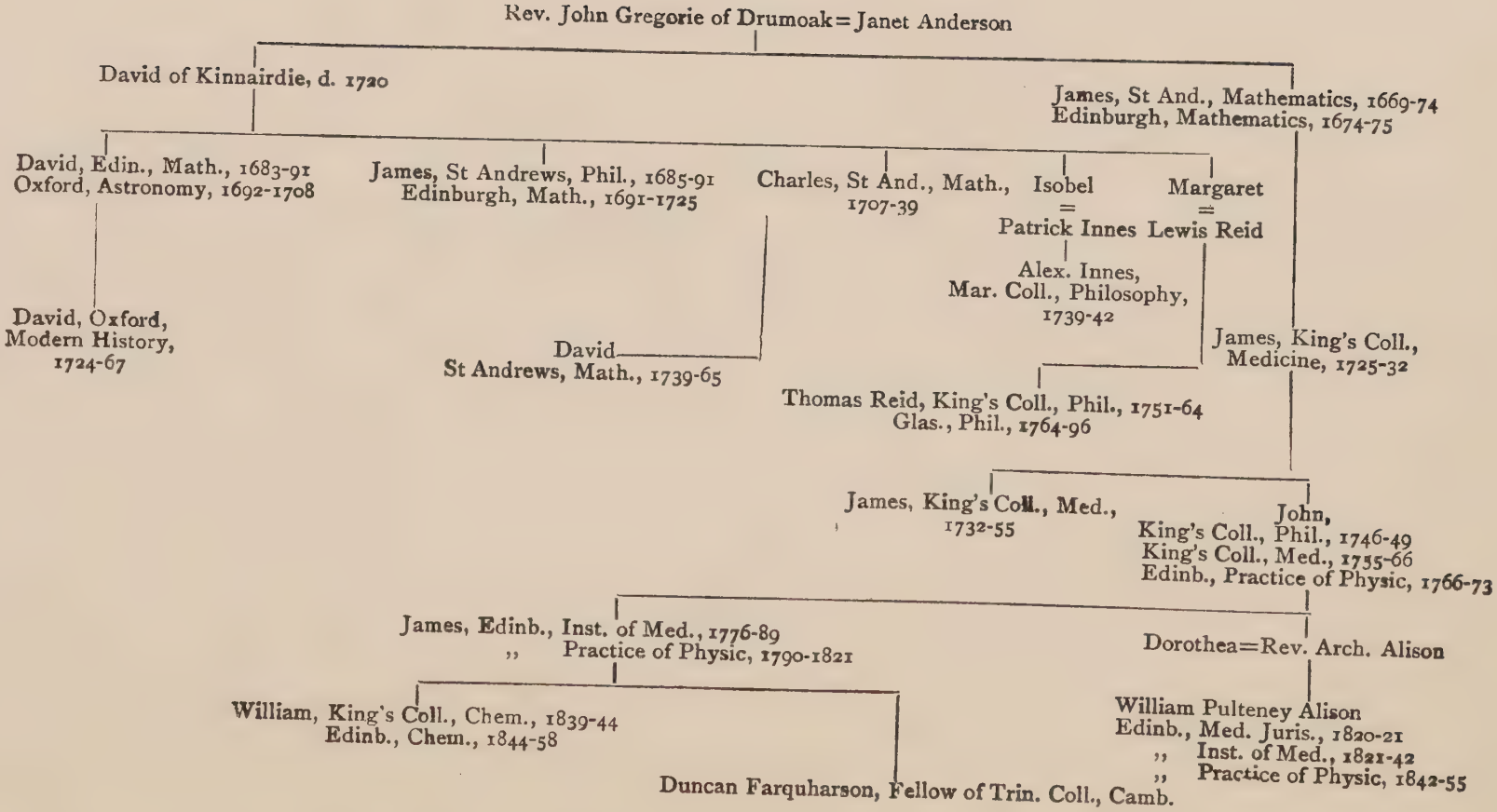
JAMES GREGORY, 1753-1821 125

CHAPTER X

WILLIAM GREGORY, 1803-1858 141

CHAPTER XI

RETROSPECT 152


Rev. John Gregorie of Drumoak = Janet Anderson
David of Kinnairdie, d. 1720
James, St And., Mathematics, 1669-74
Edinburgh, Mathematics, 1674-75
David, Edin., Math., 1683-91
Oxford, Astronomy, 1692-1708
James, St Andrews, Phil., 1685-91
Edinburgh, Math., 1691-1725
Charles, St And., Math., 1707-39
Isobel = Patrick Innes
Margaret = Lewis Reid
Alex. Innes, Mar. Coll., Philosophy, 1739-42
David, Oxford, Modern History, 1724-67
David St Andrews, Math., 1739-65
James, King's Coll., Medicine, 1725-32
Thomas Reid, King's Coll., Phil., 1751-64
Glas., Phil., 1764-96
James, King's Coll., Med., 1732-55
John, King's Coll., Phil., 1746-49
King's Coll., Med., 1755-66
Edinb., Practice of Physic, 1766-73
James, Edinb., Inst. of Med., 1776-89
,, Practice of Physic, 1790-1821
Dorothea = Rev. Arch. Alison
William, King's Coll., Chem., 1839-44
Edinb., Chem., 1844-58
Duncan Farquharson, Fellow of Trin. Coll., Camb.
William Pulteney Alison
Edinb., Med. Juris., 1820-21
,, Inst. of Med., 1821-42
,, Practice of Physic, 1842-55

THE ACADEMIC GREGORIES

CHAPTER I

THE GREGORIES

'The moon's on the lake, and the mist's on the brae,
And the clan has a name that is nameless by day.
Then gather, gather, gather Grigalach!'
The Macgregor's Gathering—SCOTT.

THE able Scots family of Gregorie can trace its descent from the Macgregors of Roro, the younger branch of the Glenlyon family. The name Gregorie,—which is the Saxon form of M'Gregor—had, most fortunately for its owners, been assumed before 1603, the darkest time in the annals of that clan. The proscription which then fell upon everyone bearing the name of M'Gregor could not touch the Gregories; but the change of name, which saved them from the penalties that fell so heavily upon their Highland cousins could not and did not alter their natures, and all the Gregories, with perhaps the single exception of the Dean of Christ Church, were at heart M'Gregors. Nothing that civilisation, education, wealth and society could do to modify their disposition was able entirely to obliterate in them the warlike character of their Highland forefathers. We remember this, and when in the nineteenth century we see a learned professor

of the Practice of Physic beating his fellow-professor in Edinburgh University quadrangle, we know that he was not really James Gregory but James M'Gregor.

The claim of the Gregories to recognition in Scottish biography does not rest on the outstanding genius of any individual member of the family, so much as on the number of great and brilliant men belonging to it, who have, in their day, formed and educated generations of the youth of Scotland. From the middle of the seventeenth century to the middle of the nineteenth century, with a gap of only a few years, some of the Gregorie connection were professing either mathematics or medicine in one or other of the Scottish universities. They were great teachers, lucid, clear-sighted and advanced in their views, and naturally leaders of men. Galton, in his book on *Hereditary Genius*, in which he 'endeavoured to speak of none but the most illustrious names,' cites the Gregories as a striking example of hereditary scientific gifts. He considers that the mathematical power came into the family with Janet Anderson, who married the Rev. John Gregorie, parish minister of Drumoak in the year 1621. From these two are descended no less than fourteen professors, and as there is no record of special power in the Gregorie family till we come to the sons of John Gregorie, it may be taken for granted that the ability came from the Andersons, who were distinguished in the foregoing generations.

Janet Anderson was the daughter of David Anderson of Finzeach, in Aberdeenshire; a man who was possessed of such universal talent that he was popularly called 'Davie do a' thing.' Two of his deeds come down to posterity; the one, the building of St Nicholas steeple in Aberdeen,

upon which he himself is said to have placed the weather-cock; and the other, the removal of a great boulder, called Knock Maitland, which lay in the entrance to Aberdeen harbour and endangered the passage of every ship sailing in or out. This he removed by placing chains under it at low tide, and fastening them to a huge raft, which at high tide lifted up the rock and carried it out to the open sea.

Janet Anderson's near kinsman was the Professor of Mathematics in the University of Paris, and she herself was a great mathematician and is said to have taught her sons. If that was the case, one at least of her pupils did her great credit, for her younger son, James, lived to take a foremost place among the mathematicians of his day, and to be the inventor of the Gregorian Telescope.

In 1621, when the Rev. John Gregorie married Janet Anderson, he was the minister of Drumoak, a remote parish on the Dee, where in peaceful times he might have fulfilled his quiet duties with little to disturb him. Towards the end of the first half of the seventeenth century. however, Scotland was in a ferment, and in a state of civil and religious turmoil which made itself felt throughout the land. In Aberdeenshire, both the clergy and the laity were in sympathy rather with Laud and Prelacy than with Henderson and Presbytery. This brought them into violent collision with the party in power, and among the rural clergy there were few names more distasteful to the Covenanters than the name of John Gregorie. When therefore in 1639, the government sent an army to coerce refractory Aberdeenshire, he knew that he would receive no toleration and fled, meaning to join the king at Newcastle. The ship in which he tried to escape was boarded, and the fugitives were made to return, and in the following year

Gregorie's fears were realised, for General Monro, who was then stationed near Aberdeen on the outlook for rebels from the Covenant—especially rich ones—remembered the minister of Drumoak. Spalding tells us the pitiful story.

'Upone the second day of Junij, Mr Johne Gregorie, minister at Dalmoak, wes brocht in to Munro be ane pairtie of soldiouris. He wes takin out of his naikit bed upone the nicht, and his hous pitifullie plunderit. He wes cloislie keepit in Skipper Andersonis hous haveing fyve muskiteris watching him day and nicht, sustenit upone his awin expensis. None, no nocht his awin wyfe could have privie conference of him, so straitlie wes he watchit. At last he is fynit to pay generall Major Munro 1000 merkis for his outstanding agains the covenant and syne gat libertie to go. Bot in the Generall Assemblie holdin in July, he wes nevertheless simpliciter deprivit, becaus he wold not subscryve the covenant; and when all wes done he is forst to yield, cum in and subscryve, as ye have hierafter.'

It was not till 1641 that, at St Andrews, the Laird of Drum's petition for his restoration had effect; when in token of his reinstatement, Gregorie along with his rival, Mr Andrew Cant, was chosen to preach at the visitation of the Presbytery of Aberdeen. This fellowship with a man, whose qualities have been embalmed in his name, very nearly cost him the favour of the party to which he now belonged. Here again is Spalding's account, naïve and full of the spirit of the time.

'Upone Tuysday 6th September, Mr Johne Gregorie, minister at Dulmoak at the visitatioun of the Kirk of New Abirdene teichit most lernidlie upone the 4th verss of the

2nd chapdour to the Collosians, and reprehendit the order of our Kirk and new brocht in poyntes. Mr Andrew Cant, sitting besyde the reidar, as his use was, offendit at this doctrein, quicklie cloissit the reidaris buke, and laid down the glass befoir it wes run, thinking the minister sould the sooner mak an end; bot he beheld and preichit half ane hour longer nor the tyme. Sermon endit the bretheren convenis to their visitatioun, quhair Mr Andrew Cant impugnit this doctrein, desyring the said Mr Johne to put the samen in wreit, who answerit, he wold not only wreit bot print his preiching, if neid so requirit, and baid be all what he had teichit as orthodox doctrien. The bretheren hard all and had their owne opiniouns, and but ony more censure they disolvit, sumwhat perturbit with Cantis curiositie. Upone Thuirsday, he raillit out in his sermon aganes the said Mr Johne Gregorie's doctrein, and on Sunday likwais. At last, be mediatioun of the toune's balleis at a coup of wyne, they twa war satled with small credet to Cantis bussines.'

Though Gregorie was not censured by the whole body of the clergy in 1642, as there seems little doubt Mr Cant had intended, he was not absolutely free from anxiety. No doubt life went smoothly enough with him at times, for he amassed quite a large fortune. The estates of Kinairdy and Netherdale were given to him on the insolvency of the Crichtons in satisfaction of £3,800 which he had lent to them; and his wife on her part had succeeded on her father's death to a portion of the estates of Finzeach. The land brought its sorrow with it, and passed out of the hands of the family again, but that was afterwards.

In 1649 John Gregorie was once more deposed, and for the last time. The Synod recommended that he

should be reinstated, but he did not long survive this recommendation. He died in 1650, and was buried at Drumoak.

Among the slaty monuments in the churchyard there is none that bears the name of John Gregorie. Two hundred and fifty years have obliterated what must once have been written, and the Dee is gaining ground from the graveyard at every time of spate. The old church stands and the manse, which has been turned into a farmhouse, but that is all.

There is a memorial of John Gregorie and his wife in a mortification for the education and maintenance of ten poor orphans 'within the said Burgh' of Aberdeen.

John Gregory left three sons, Alexander, who was served heir to his father's very considerable property in 1651, David, known as David of Kinairdy, and James, the great professor of astronomy. His two daughters, Margaret and Janet, were both married, the latter to Thomas Thomson of Faichfield.

Loving and generous, as no one who reads about Alexander Gregorie can doubt that he was, he would yet barely have been included in this book, if it had not been for his terrible death, which made the family estates fall into the hands of his younger brother. Kinairdy and Netherdale, which had been allotted by law to his father on the bankruptcy of the Crichtons, were too much favoured by their former possessors to be relinquished without disturbance into the hands of their rightful owners. The Crichtons harried Alexander Gregorie, and that so frequently, that he was obliged at last in 1660 to seek the shelter of the law. James, second Viscount Frendraught, took no notice of the

summons to appear at court, and so was outlawed, but this sentence was remitted upon his giving security (in a bond of £40,000 Scots or £3,333, 6s. 8d. sterling) to keep the peace and to appear before the Privy Council to answer the charges made against him. Bonds such as this succeeded each other, till the final outbreak which occurred on the 7th of March 1664. Then with the shed blood of Alexander Gregorie came peace, but at what a cost. In the records of the Justiciary Court there is a description of the murder, which somehow belies its dusty origin, and sounds as if some old Aberdeenshire gossip were telling the tale with real enjoyment over her peat fire.

'It is of veritie that the said James, Viscount of Frendraught and the said James Crichtoun of Kinairdy, and Frances Crichtoun his sone, having unjustlie conceaved ane deidlie hatred and cruell malice against umq^le^ Mr Alex^r^ Gregorie of Netherdeall and the said Frances Crichtoun having upon the sevent day of March last by-past rancountered with the said Mr Alex^r^ Gregorie at the hous of Mr Alex^r^ Gairdine minister at Forge, the said Frances treacherouslie inveited and desyred the said Mr Alex^r^ to goe alongs with him from the said hous, which he fearing no harme did, and as they went alongs the said Frances Crichtone without any provocatione (of) foirthought, felony and precogitat malice drew his sword and rane at the said umq^le^ Mr Alex^r^ Gregorie thinking to have killed him at one thrust; but the said umq^le^ Mr Alex^r^, everting the stroak and closing with him, not offering to doe him any prejudice at all, the said James Duffus drew his sword and stroke at the said umq^le^ Mr Alex^r^ whereat his horse running away and the

said Frances mounting on his horse, he divers times ran upon the said umq^le^ Mr Alex^r^ and wounded him in his arme, whereupon the said umq^le^ Mr Alex^r^ yielded himself prisoner to the said Frances and delivered to him his sword being requyred be him sua to doe, hoping that his honour would therrupon have obliged him to have desisted from all furder trubling and assalting him, but upon the contrair the said Frances baislie and treacherouslie. with the assistance of the said James Duffus his servant persewed him more eagerlie than befoir, fyred pistolls at him, gave him several wounds in his breast and head to the effusione of his blood in great quantitie and then caused him to mount up behind the said James Duffus and caryed him to the hous of George Morisone of Boignie, and putt him in ane chamber wherein the said James Vicount of Frendraught was lodged and then the said Frances Crichtone left him and upon the morne, being the last day of March last by past, about thrie hours in the morning, the said Frances Crichtone accompanied with Walter Henry, gairdiner at Frendraught, William Innes yr., George Mearns yr., Rob Tarres yr., James Howie, sone to Georg Howie in Tounslie, and the said James Duffus all in armes cam to the said hous of Boignie, where the said umq^le^ Mr Alex^r^ Gregorie was lying bleeding in his wounds, they and the said James Viscount of Frendraught and George Forbes his servant efter many baise and opprobious threatenings uttered be them against the said umq^le^ Mr Alex^r^ did most inhumanly and barbarouslie dragg him out of his bed as he was lying bleiding in his wounds, and that without cloak, hat, or shoves, or bootts, and did cast him overthwart ane hors, upon his breast, his head and armes hanging on the

ane syd and his leggs on the other syd and so caryed him away in ane cold and stormy morneing to George Yong's hous in Coanloch being ane obscure place and myles distant from the said hous of Boignie where they keiped him prisoner . . . in his wounds be the space of threi days, *tanquam in privato carcere* ; and then, deserting and leaving him, he was upon the threttein day of the said month by the help of some friends caryed to the burgh of Aberdeine, where he lay languishing of the said wounds and the bad usage which he had receaved of the foir-named persons, and then dyed of the samyne and sua was cruelly and unnaturally killed and murdered be them ; of which murder under trust, at least slaughter committed upone precogitat malice and forethought felony, as also of the said usurpatione of His Majestie's authority in takeing and apprehending unwarrantably ane frie leidge, the foirsaids persons and ilk ane of them, as also the said James Crichtoune of Kinairdie by whose instigation and hunding out the foirsaids crymes of slaughter upon foirthought felony and precogitat malice and usurpation of His Majestie's authoritie were committed and are actors airt and pairt, and the samyne being found be ane assize they aught to be punyshed theirfor in their persons and goods to the terour and example of utheris to commit the lyk heirafter.'

Surely this was not a case for the King's leniency ; yet because Francis Crichtone was a Roman Catholic, and favoured by the Duke of York, a warrant came from His Majesty for the suspension of the trial of Francis Crichtone.

'Compeired Mr George Mackenzie advocate, and produced ane letter from His Majestie directed to the Justice

General and Justice depute whereof the tenor follows, Superscribed Charles R. Whereas we are informed that Alexander Gregorie did not die of the wounds alleged to have been given him by Frances Crichtone now prisoner at Edinburgh, these are to require you to suspend that criminal process against Frances Crichtone until we shall hear further concerning that business from our Privy Council at their next meeting in June, for which this shall be your warrand. Given at our Court at Whitehall the 13th day of May 1664 and of our reign the 16th year by His Majestie's command.

'Sic subitur Lauderdaill.

'To our right trustie and right well-beloved cousin and counselloure and to our trusty and well-beloved our Justice General or Justice Depute.'

James Crichtone of Kinairdy and Viscount Frendraught were acquitted at the trial, the assistants at the murder were 'put to His Majestie's horn, and all their goods forfeit.' As for Francis Crichtone, the principal in this affair, having procured the postponement of his trial, he escaped from the Tolbooth Prison; and after another futile attempt on the part of the Gregories to secure a trial, he obtained a pardon under the Great Seal in 1682.

CHAPTER II

DAVID GREGORIE OF KINAIRDY, 1625-1720

'Not skill alone of ear and eye
Was yours, but something more—a heart.'
—*Echoes and After-thoughts.*

DAVID GREGORIE, the second son of the Reverend John Gregorie, was destined by his father for a commercial career. Alexander, his elder brother, as we have seen, was heir to the estates of Kinairdy and Netherdale, and to a good deal of money: the young brother James was so remarkable a mathematician that he was allowed to follow his own bent and devote himself purely to mathematics. But David, poor David, most unwilling to go, was sent to Holland to learn to be a merchant, probably to Campvere, the happy haven to which so many Scots traders turned. Herrings and stockings — the great Aberdeen exports of the day—how we can imagine David Gregorie seeing to the unlading of such cargo as this, with his heart and very likely his head far away in Scotland! Anyhow he did not stay a day longer in Holland than was necessary, for after his father's death he returned home and settled in Aberdeen in 1655. In the same year he married Jean, daughter of Patrick Walker of Orchiston, a great Episcopalian, and also a great Tory.

David Gregorie was only thirty, and the best of life was still before him. He spent his time in just such a way as attracted him. He studied medicine, mechanics, mathematics and physics, read every interesting book within his reach, and corresponded with scientific contemporaries both in Scotland and out of it. His letters, full of thoughts about the atmospheric laws, went to Edmé Mariotte in his cell. He may have got some help from them—certainly Gregorie was immensely interested in the Frenchman's discoveries.

His life was enriched by many delightful friendships, but more than all by the affection shewn to him by his brothers and expressed in so many practical ways. In 1660 Alexander settled the property of Over Aschalache on David and his family, subject to the life-rent of old Mrs Gregorie. It was a most kind arrangement, and must have been a great help in providing for the growing family. Three years later he was made librarian of King's College, and there he spent his time, reading and searching and arranging in the dreamy way of an old world librarian. But life, which is so fearfully unknown, held in it for David Gregorie in 1664 that which was to alter his whole career. By the tragic death of his brother, who left no children, all the family estates passed to him, and he became suddenly a rich man. He left Aberdeen, and went to live in the mansion-house of Kinairdy, with which his name is now always associated.

Few people pass through the remote parish of Marnoch, which lies on the borders of Banffshire and Aberdeenshire, but those who do are most certainly rewarded. The Deveron, not so well known as the Dee, still keeps a charm of loneliness for those who love her, and the

burns are browner than in the southland. By such a burn was Kinairdy built, on a little promontory where the stream joins the Deveron. When I asked to see Kinairdy, I was told 'There's nothing to see there, only the old tower down by the river,' but the old tower was enough for me, and packed full of memories. To this old house it was that David Gregorie took his wife and children in 1664. We get occasional glimpses of him as he passes about the country, at one time laughed at by his neighbours for his total ignorance of farming, while at another, in a case of illness, they would eagerly wait for his coming, with a feeling as if life and death were in his hands. Sometimes no doubt it was so, and to rich and poor alike he would go, giving his advice gratuitously for the love of doctoring, and because he was benevolent.

This medical skill of his stood him in good stead on one occasion, when a deputation of ministers called upon him to answer for himself on the charge of being a wizard. There were dread stories abroad concerning him, how, by having sold his soul to the Devil, he was able to foretell the weather (what a thing to sell your soul for in Scotland!) how, after days of sunshine, he could predict rain and sure enough the rain would come, and he might make it go on raining for weeks through his intercourse with the powers of darkness. Poor Gregorie, face to face with his accusers, went through the little crowd of his children, and brought in the familiar spirit, which was only a barometer, tried to explain how it worked, asked them to examine it (which I do not believe any of them would do), and won them over to his side by his sheer lovableness. After all, who was to doctor them with the skill of David

Gregorie if he were burned for a wizard? So the kind doctor was left to his home and his work. The ministers did not understand his defence, but there was not one of them who could not remember how, with some well-chosen simple, he had healed one of their dear ones in the hour of need.

As his sons and daughters grew up, Gregorie found it more and more impossible to get the quiet which he so much wanted for his work. His patients and his children between them were taking up all his leisure. In these circumstances he determined to rearrange his hours. He retired early to bed, and rising about two in the morning, worked for a few hours in the stillness of the night. When that was over, he went to sleep till he felt rested. If these nocturnal habits were known to the deputation that waited upon him, there was some excuse for their fears. What more alarming than the shadows in the room! The midnight crucible and the sulphurous smell were not there, but it must be admitted that the Laird of Kinairdy loved the hours of darkness better than the day.

David Gregorie had twenty-nine children. Fifteen of them were the children of his first wife, and fourteen the children of his second. Nine of them died as quite little babies, but twenty grew to be older; and so, though everyone says, that it was remarkable for Kinairdy to have three sons professors of mathematics, it must be allowed that he had a most unusual number of children to choose from!

In the pedigree of the family of Gregorie in Mr Philip Spencer Gregory's book, from which the table of the professors is for the most part taken, it is seen that David,

Professor of Mathematics in Edinburgh, and later of Astronomy in Oxford, Isabel, the grandmother of Professor Innes of Aberdeen, and James, Professor of Mathematics at St Andrews and Edinburgh, were the children of the first marriage; while Margaret, the mother of Thomas Reid, and Charles, Professor of Mathematics in St Andrews, were of the second marriage.

Jean Walker was probably a cleverer woman than Isabel Gordon, Gregorie's second wife. In the first place she converted her husband to Episcopacy and Toryism, and secondly, her son David was much the most brilliant of the Kinairdy children. To him it was, when he was working as Savilian professor at Oxford, that old Kinairdy confided a model of an improved cannon, which in his enthusiasm to improve the munitions of war, he had designed in his peaceful home by the Deveron. His son, who thought it most ingenious, showed it to Sir Isaac Newton, and the great philosopher evidently agreed with him; but to invent an instrument, the only object of which was to kill better than any cannon in use, seemed to him a fearful abuse of ingenuity. The horrors of Marlborough's wars, where men were slaughtered by the thousand, were they not enough as it was? Who could deserve mercy from his Maker if he were to bid god-speed to such a terrible machine? Sir Isaac asked the professor to destroy the model, which he did, and the little toy which may have been a gatling gun, for aught we know, was broken in pieces.

Old David Gregorie, who had been preparing to join the allies in Flanders, to see his cannon in use, bore his disappointment most sweetly. Perhaps Newton was

right, he thought, for although he had meant to help his fellow-countrymen, the invention would soon be known to the enemy, and the Gregorie gun be levelled against his compatriots.

There seems to be something almost pitiful about the end of David Gregorie's life. Kinairdy was made over to his son, the Savilian professor at Oxford, the sweet old house forsaken, the rooms in which such merry life had been lived, deserted, and the flowers from which the gentle herbalist had drawn so many healing virtues, left to die. It would be best to think that he returned to Aberdeen at the call of King's College, which 'Beautified with bells within, without decked with a diadem,' is said to ring her sons back to her before they die. But there were probably other reasons, and more potent ones. His children had to be provided for, and his wife, shrewd and not poetical (or else how could she have been a Hanoverian?) thought of all that her brother, the Provost of Aberdeen, had in his power, and she knew he could do much and would do much for her children, so they set up house once more in the old town of Aberdeen.

In 1715 comes another turmoil, a flitting, almost a flight across the North Sea to Holland, to be out of the difficulties of conflicting hopes and fears, to be out of the country, to take at least no part against the Stuarts, whom we suspect Kinairdy of loving in his secret heart. Likely enough they may have offered him bribes, and a title in the coming kingdom, but there was another counsellor nearer and dearer to him, and with her and his children he sought the shelter of a foreign land. Two or three years passed before they returned to

Scotland. They were content to wait till the storm was past. When they came back Gregorie's life was nearly over. He died in 1720, an old man of ninety-five.

> 'And in his story still remains
> A distant memory of life's loss and gains,
> A starlit picture of his joy and pains.'

A visit to his widow, who was Thomas Reid's grandmother was described by her grandson in after years in a letter to James Gregory, Professor of Medicine in Edinburgh. 'I found her,' he says, 'old and bedridden, but I never saw a more ladylike woman. I was now and then called into her room, when she sat upon her bed, or entertained me to sweetmeats and grave advices. Her daughters, who visited her, as well as one who lived with her, treated her as if she had been of superior rank, and indeed her appearance and manner commanded respect. She and all her children were zealous presbyterians, the first wife's children were Tories and Episcopalians.'

But to return to what interests us about David Gregorie of Kinairdy, in connection with his many professorial sons and other kindred, he was a great lover of science, and a worker to whom all scientific matter came home to stay. His mathematical and mechanical gifts, great as they were —and we know he was far advanced in meteorological studies—were not to be compared with the power which he had, and which now appears for the first time in the Gregorie family—the inborn gift of doctoring. He had no training except what he gave himself, but he could no more help being a physician, than his brother Professor

James could help his incessant work at mathematics. David and James Gregorie were the children of their mother far more than of their father; who, good as he probably was, is, we must confess, just a little dull. Yes, Janet Anderson, you have lived again for us in your sons!

CHAPTER III

JAMES GREGORIE, 1638-1675

> 'He learned the art
> In Padua far beyond the sea.'
>
> —SCOTT, *Lay* I, xi.

JAMES GREGORIE, the third son of the minister of Drumoak, was certainly the cleverest member of that family. He was so clever that no one had any time to tell anything about him, except his achievements in pure mathematics and in the science of optics; and indeed from his earliest days his love for mathematics was such, that his pretty mother unwilling to wait till her boy was able to go to school taught him herself all she knew of geometry, sending him away when the time came to the Grammar School of Aberdeen already far ahead of his class. He studied at Marischal College, and took his degree (laureated is the pleasant Scottish word) along with Gilbert Burnet, the readable if imaginative historian, with whom likely enough he did not find much in common, representing as they almost did fact and fancy. Now their portraits hang side by side in the Picture Gallery—Gregorie's grey and grave and stern, with an indication of what he was in the mathematical globe by his side—Burnet's less severe, satisfied with himself, and a most prosperous portrait.

After the graduation James Gregorie gave himself up to his studies, and before he was twenty-four made his great discovery of the Reflecting Telescope. It was not a chance discovery, for indeed he only described, and never saw put together, the telescope which bears his name. Anyone can see them nowadays, for they are still used, and the beautiful one set up by James Short in Edinburgh, is as clear as the day it was made, and is not used now, only because a commoner one can do the work which it did for so many years in the Royal Observatory. To the uninitiated it has a great merit, for things present themselves through it as they appear to the naked eye, and not upside down as is the case with most of the great telescopes.

In 1663, his book entitled *Optica Promota*, which contained a description of his telescope, was published in London, and thither Gregorie went, hoping that by the assistance of a practical workman he might realise his ideal.

His book had been much read by mathematicians, and amongst others by John Collins, the Secretary to the Royal Society. We can picture then the mutual pleasure with which these two men met. It was in an alehouse, where possibly the jolly tavern keeper took the Aberdonian through the fumes of his stuffy parlour, and presented him to Master Collins as a likely friend for him; anyway, this was the beginning of a life-long friendship, and Collins, who had realised at once what a possibility lay in the proposed reflecting telescope, determined to have a glass made on the principles which Gregorie had suggested in his book. With this object in view, he took his new Scottish friend to the most skilled glass-grinder

in London, but, alas! in vain. Mr Reeves could not overcome the difficulty of obtaining conoidal reflectors, but to the great mathematicians of that day, and it was a day of giants, the discovery was magnificent, and from the hands of astronomy's master craftsman, the reflecting telescope emerged in 1668 in a more beautiful form, as Newton's telescope.

Before Gregorie's time, the telescopes in England were many of them immensely long, going up even to three hundred feet, and at this length they were hardly available for scanning the heavens. The new reflector brought the size down to six or nine feet, and the idea was so ingenious, that it made Gregorie famous, and what was more, opened the door for him to friendship with Newton and Collins, to acknowledgment as an original worker by Huygens, and awakened in the Father of the Catholic Church an apprehension that one Gregorie, a Scot and a heretic, might come to deserve the spiritual blight which he is empowered to give in placing a book on the Index! It was not so very long before, that Galileo—an earlier maker of telescopes—had been accused by the learned scribes and pharisees of his day, of magic. 'Oh, my dear Kepler,' says Galileo to his brother astronomer in one of his most amusing letters, 'how I wish that we could have one hearty laugh together! Here at Padua is the principal professor of philosophy, whom I have repeatedly and earnestly requested to look at the moon and planets through my glass, which he pertinaciously refuses to do. Why are you not here? What shouts of laughter we should have at this glorious folly, and to hear the professor of philosophy in Pisa labouring before the Grand Duke with logical arguments, as with magical in-

cantations, to charm the new planets out of the sky!' It is well that Galileo laughed at this stage of his life; when he fell into the hands of the Inquisition it became no laughing matter, and even after he had renounced his views, he was subjected to many griefs, and to a long incarceration in an Italian prison.

In the fifty years which intervened between Galileo and James Gregorie, Louis, the great monarch of France, had taken science under his care, so the Inquisition was no longer available as a means of preventing the spread of original thought, and Gregorie, unsuspecting of the pope's attitude towards him, went to very Padua itself, and stayed there for three years.

Padua, with its still colonnades and drowsy population, is visited now, not in the eager search for learning, but because of the pale frescoes with which Giotto had gifted it long before Gregorie was there, but in the seventeenth century, what other attractions drew men thither! Then such men as Riccioli, Manfredi and De Angelis were drawing the erudite from far and near to sit at their feet. Such men as Manfredi and De Angelis, who were they? Alas! they, the great mathematical champions of their day, have passed into oblivion, and are only remembered now, even in Padua, by the work of the masons who carved their names on the walls of the University.

'In thine halls the lamp of learning
Padua, now no more is burning;
Like a meteor, whose wild way
Is lost over the grave of day,
It gleams betrayed and to betray:
Once remotest nations came
To adore that sacred flame,
When it lit not many a hearth
On this cold and gloomy earth;

Now new fires from Antique light
Spring beneath the wide world's might:
But their spark lies dead in thee,
Trampled out by tyranny.'

As for Gregorie, he was at variance with Riccioli, De Angelis and Manfredi, and though we have only negative evidence, we hope that he was at one with the other great teachers of his time in Italy. *Optica Promota* had been much read on the Continent, and there the suggestion which he made that the solar parallax might be determined by the transit of Venus and Mercury had been accepted, and till a few years ago it was the method employed in finding out the distance of the sun. But after all, the most beautiful piece of Gregorie's work was his telescope. 'It consists of a parabolic concave speculum with a hole in its centre, having near its focus a small elliptic concave speculum. The image formed by the large parabolic speculum is received by the small elliptical one, and reflected through the aperture in the former upon a lens which magnifies it.'

In Padua his work took a more purely mathematical turn, and resulted in a book 'pursuing a hint suggested by his own thoughts,' of which he had only a few copies printed. It was entitled *Vera Circuli et Hyperboles Quadratura*, and Montucla in writing of it says that the title is misleading, and that the author does not claim, except approximately, through his infinite converging series to find the square of a circle or hyperbola. Collins, to whom a copy was sent, read part of it before the Royal Society. Lord Brouncker and Dr Wallis were enthusiastic in its praise, and under such encouragement Gregorie published it along with some fresh matter under

the title of *Geometriae Pars Universalis inservieus Quantitatum Curvarum Transmutationi et Mensurae.* The book came out in Padua with the permission of the State of Venice, and was a great success. Before its publication the Royal Society showed their appreciation of it by making Gregorie a Fellow.

This was in January 1668; in March he was still in Padua, but in all the confusion of departure, and not long after he returned to Scotland, and back to his much loved Aberdeenshire, where happiness was awaiting him on all sides. There was Kinairdy to visit with its many charms, and there was Aberdeen, and at Elrick there was a cousin who was after all, it is easy to guess, the end of his journey. This was Mary Burnet, the widow of John Burnet, who to his great joy consented to become his wife, and was married to him in 1669.

The astronomer found love-making dreadfully time-consuming, and vaguely regretted it. You see, it was apt to interrupt his correspondence with Huygens and Halley, with Newton and Collins, with Dr Wallis and Lord Brouncker. Here is a pathetic letter from him written in the early part of the year to one of his mathematical correspondents—'I have several things in my head as yet only committed to memory, neither can I dispose of myself to write them in order and method till I have my mind free from other cares.'

His wife was only twenty-three, although this was her second marriage, and even when after Mr Gregorie's death she married Mr Ædis, she was still young and very beautiful. A rare piece of her work remains in the tapestries which adorn the Magistrates' Gallery in St Nicholas Church in Aberdeen. Susannah and Jephtha's

daughter were her subjects, and there they are still, looking out of their panels, from the midst of their beautiful blue and green landscapes, with the rigid uncertainty of tapestry portraits. Bailie Burnet would have been proud if he could have foreseen what a combination of ecclesiastical and civic honour was to fall to his wife's needlework.

Mrs Gregorie's father, George Jameson the artist, drew the pictures for her. Walpole called him the 'Van Dyck of Scotland,' though it is difficult to know why, as there is really no resemblance in their work, but at least Jameson and Van Dyck were friends in Rubens' studio, and the kindly appreciation of his fellow-citizens has remembered and repeated the phrase.

In 1670, James Gregorie was appointed to the Chair of Mathematics in St Andrews, where he had a successful if sometimes vexed life. His duties were to deliver two lectures a week, and to answer any mathematical questions that might be set before him. 'I am now much taken up,' he writes in May, 1671, 'and have been so all this winter by-past, both with my public lectures, which I have twice a week, and resolving doubts, which some gentlemen and scholars propose to me. This I must comply with, nevertheless that I am often troubled with great impertinences, all persons here being ignorant of these things to admiration. These things do so hinder me, that I have but little time to spend on these studies my genius leads me to.'

He lived near the beautiful cathedral and almost under the shadow of St Regulus, and there his name is still remembered in Gregorie's Lane and Gregorie's Place. He worked in the long, many-windowed library, where the

clock which he used is still at work, and where it has been keeping time these two hundred years, since Huygens, who invented the use of the pendulum in clocks, and Gregorie himself were laid at rest.

Huygens and Gregorie had a long feud about his Paduan book. Its faults as the Dutchman thought were lack of 'distinguished perspicuity' and intricacy in its invention. But Huygens must have lived to regret his criticisms, however well founded they were, for with a sudden burst of the M'Gregor spirit, Professor James sent forth a volley of answers, his official statements through the medium of the Philosophical Transactions, and his unofficial through his many letters. Neither his great opponent, nor his great opponent's allies were spared. 'I am not yet so much a Christian as to help those who hurt me. I do not know (neither do I desire to know) who calleth in that preface, Hugenius his animadversions of November 12th 1668, judicious, but I would earnestly desire that he would particularize (if he be not an ignorant) in what my answer, which is contradictory to Hugenius his animadversions is faulty; for in geometrical matters, if anything be judicious its contradictory must be nonsense. I do not know what need there was for an apology for inserting my answer, but to compliment Hugenius, and violently (if it be possible) to bear down the truth. I imagined such actions below the meanest member of the Royal Society, however, I hope I may have permission to call to an account in print the penners of that Preface.' The account was never called for, because Newton in the meantime, gave the simpler solution, which Gregorie had been declaring an impossibility, but it must be remembered

that Gregorie's method although almost impossible to any but the most clear mathematical mind, was easy to him and was correct as far as it went. Can anyone help loving Huygens, even though they know no more of him than what is seen in his intercourse with Gregorie? What graciousness and kindness was returned in exchange for the thunderous treatment he received! Sick, as he thought he was unto death, he suggested Gregorie as a fit successor to him in the favour of Louis XIV., and we find his father, who was secretary to the Prince of Orange and a poet—the poet of the garden—similarly occupied, trying to influence the great folk with whom he came in contact to further Gregorie's interests. But in spite of the recommendation of the Académie des Sciences, the Royal Society, and such friends as he had at court, Gregorie never received any Royal patronage; the want of which he took very calmly and with a great deal of broad good sense, never having expected any other result. 'I have had sufficient experience in the uncertainty of things of that nature before now, which maketh me since I came to Scotland, how mean and despicable so ever my condition be, to rest contented and satisfy myself with that, that I am at home in a settled condition by which I can live. I have known many learned men far above me upon every account with whom I would not change my condition.'

In 1669 Gregorie's books were suppressed in Italy, which came as a shock to him, and was all the more grievous because it deprived him of many of his most interested readers—and controversialists! Scotland, however, supplied the deficiency wonderfully well. There was a professor in Glasgow called George Sinclair, a mathe-

matician, and a demonologist of great repute, who wrote a book on Hydrostatics. It was quite clever, and may have been more interesting to the general reader than books on Hydrostatics usually are, because of an appendix in which some strange things were included, amongst others, A Short History of Coal and the Story of the Devil of Glenluce. The humour of the combination was too much for Gregorie, and under the name of Patrick Mathers, Arch-Bedal to the University of St. Andrews, he wrote an answer to the scientific part of the Hydrostatics, which he called 'The Great and New Art of Weighing Vanity.' Witty, scurrilous, easily written and easily read, the book was a great source of merriment both to Gregorie and his colleagues at St. Andrews, and it raised a perfect hurricane in Glasgow. The very name was an impertinent play on the title of his antagonist's former book *Ars nova et Magna* and the fact that Professor Sinclair was no mean adversary added zest to the battle, which continued many days. But Professor Sinclair had prepared an ill reception for his work by the edict which he had had printed and sent abroad to persuade people to order copies of it :—

'Forasmuch as there is a Book of Natural and Experimental Philosophy in English, to be printed within these four months, or thereabouts ; wherein are contained many excellent and new purposes : As first, Thirty Theorems, the most part whereof were never so much as heard of before : ' (Alas ! poor professor what a beginning ! And is the ending any better !) 'and an excellent way for knowing, by the eye, the Sun or Moon's motion in a second of time, which is the 3600 part of an hour, and many others of different kinds, useful and pleasant. These are

therefore to give notice to all ingenious persons, who are lovers of Learning, that if they shall be pleased to advance Gedeon Shaw, Stationer at the foot of the Ladies Steps, three pounds Scots, for defraying the present charges of the said Book, they shall have from him, betwixt the date hereof and April next to come, one of the Copies: And for their further security in the interim the Author's obligation for performing the same.'

'Which so exposed to my masters the vanity of that confident man, that they were forced plainly to let him know their mind,' wrote the Arch-Bedal, and some of his own sentiments were expressed in a letter which he afterwards quoted in the Preface to his book *The Great and New Art.* 'Sir,—I admire exceedingly the forwardness of your humor (I will call it no worse) in your last to ——: he is a person not concerned in you or in your books, neither will he ignorantly commend anything, as it seems ye expected he should have done, when ye sent him these papers. Ye might have known long ago that he had no veneration for what ye had formerly published, for he made no secret of his mind, when he was put to it. Ye may mistake him, if ye think that any by-end will cause him speak what he thinks not: nevertheless he delivered your commission, and was willing to be inconcerned, expecting their answer. They pressed him to know his judgment of your last piece: he told ingenuously the truth, that there was none of them had less esteem for it than himself. He hopes you are so much a Christian, that ye will not be offended with him for speaking what he thought when he had a call to it; and yet albeit ye seem to favour him more than others, he hath ground to look upon himself as one of the sophistical rabble, for they only are such

who condemn anything ye do, the rest of the University continuing always learned persons. It is to no purpose to apologize for themselves, ye take all for granted, which ye have heard: I shall not put you to the pains of proving it; yet it seems ye would hardly have believed it so easily, had not your conscience told you, that they had some reason for their judgement, which really was this following: That they see nothing in your last piece, new and great (albeit it be *Ars nova et Magna*) save errors and nonsense; as your demonstrations of the pendulum, your *Nihil spatiale*, your *Gravitas circularis*, and *horizontalis*, your question "Whether or no a body may be condensed in a point?" etc., too many to fill several letters: for ye must not call experiments new inventions, otherwise ye are making new inventions every day, neither must ye call different explications new inventions, else the same thing might be invented by almost every Writer. I admire how ye question the R. Society; for I desire to know one point of doctrine, which ye or they either pretend to, concerning the weight of the air, the spring of it, or anything else in your book, save mistakes, which was not received by all mathematicians, and the most learned of Philosophers many years before any of you put pen to paper. Ye have been at much pains to prove that by experiment, which all the learned already grant, and some have demonstrat *à priori* from the principles of Geometry and Staticks, and many *à posteriori* from experience if sense may be called a demonstration: yet ye are the only man who produceth the *Ars Nova et Magna* when all others are out of fashion. But more to your commendation, it seems ye do all these wonders by Magick; for ye have the ordinair principles of none of these Sciences:

Euclid is as much a stranger as reason in all your Books: and for this *Perque Mathematicos semper celebrabere fastus!* At last ye come to prove a new doctrine, which before now was near 2000 years old, with thirty new Theorems which must not be named because they are of such a tender and delicat complexion that the very naming of them will make them old. There are also many other excellent things, which will be all new when they were but printed yesterday. It is like some of these dayes, we may have an *Ars Nova et Magna*, to prove that a piece of lead is heavier than so much cork. I know not wherefore ye undervalue any man, because he hath not as great esteem for your notions as yourself: Have not we as much freedom to speak our mind of you, as ye have to write yours of the R. Society and the University of Glasgow? The greatest hurt ye can do us, is to make Dromo famulus one of our Principals. I think it not strange that ye using only demonstrations of sense, should admire the force of our imagination, in affirming no method of Dyving so good as that of Melgin. I am sure that the man Dyving for a continual time, if he be not also of your invention, must breath of the air; and this air must either be kept close by itself, as in Melgin's way, or communicat with the air above. If the latter be your invention, I doubt ye must also have some Chirurgical invention to apply to your Dyver at his return, if he go to any great deepness: If the former, it is the same with Melgin's; and you cannot neither any man else help it, but in circumstances (which alters not the method) and perchance to little purpose. As for Archimedes, I am sure he wanted no necessary requisit to prove the weight of water in its own

Element. I know not what else ye intend to prove: Always I am as sure that he had two great requisits, which ye want; to wit, Geometry and a sound head. As to what ye write concerning the imperfection of Sciences; the scientifical part of Geography is so perfected, that there is nothing required for the projection, description and situation of a place, which cannot be done and demonstrat. The scientifical part of opticks is so perfected, that nothing can be required for the perfection of sight, which is not demonstrat, albeit men's hands cannot reach it; and these being the objects of the fore-said Sciences, your authority shall not persuade me that it is altogether improper to call them perfect. In the Hydrostaticks, it were no hard matter to branch out all the experiments that can be made into several Classes, of which the event and reason might perfectly be deduced, as consectaries (I speak not here of long deductions, as ye seem to rant) to something already published: if it be noticed but rudely (as ye, not understanding what niceties of proportion means, must do) only considering Motion and Rest: And I believe there is none ignorant of this who understands what is written in this Science. Upon this account writing to you, I might call it perfect, albeit I know there are many things relating to the proportion and acceleration of the motions of fluids, which are yet unknown, and may perchance still be. Ye shal not think that I speak of you without ground; (for in your *Ars Magna et Nova*, ye bring in your great attempts for a perpetual motion; all which a novice of eight days standing in Hydrostaticks would laugh at). I do not question that this age hath many advantages beyond former ages; but I know not any of them, it is beholden

to you for: only I admire your simplicity in this. Astronomers seek always to have the greatest intervals betwixt Observations, and ye talk that ye will give an excellent way for observing the Sun or Moon's motion for a second of time; that is to say, as if it were a great matter that there is but a second of time betwixt your Observations. I wonder ye tell me the eye should be added; for the invention had been much greater had that been away. I do confess that a good History of Nature is absolutely the most requisite thing for learning; but it is not like that you are fit for that purpose, who so surely believe the miracles of the West, as to put them in print; and record the simple meridian altitudes of Comets, and that only to halfs of degrees or little more as worth noticing. However, if ye do this last part concerning Coal-sinks well, and all the rest be but an *Ars Magna et Nova*, ye may come to have the repute of being more fit to be a Collier than a Scholar. Ye might have let alone the precarious principles and imaginary worldes of Des Cartes, until your new inventions had made them so: For I must tell you Des Cartes valued the History of Nature, as much as any experimental Philosopher ever did, and perfected it more with judicious experiments, than ye will by all appearance do in ten ages. Ye are exceedingly misinformed, if ye have heard that any here have prejudice or envy against you; for there is none here speaks of you but with pity and commiseration: neither heard I ever of any man who commended you for what he understood. As for your Latin Sentences, if they be not applied to yourself, I understand them not; for here we are printing no books, we are not sending tickets throughout the countrey to tell the wonders we

can do: We are going about the imployments we are called to, and strive to give a reason for what we say. Where then are our *Doli et fallaciae, tabulae et testes, sapientia ad quam putamus nos pervenisse?* etc. In these things ye publish, ye know there is no Sophistry but clear evidence: If ye had done such great matters in *Universale et ens rationis*, ye might have had a shift; but here ye must either particularize your inventions, or otherwise demonstrat yourself derogatory to the credit of the Nation: For what else is it to confound R. Societies and Universities with *Ars Magna et Nova;* and yet when ye were put to it in print, to show your inventions, all ye could say was, that the publisher should have reflected upon the wisdom of the Creator, etc., so that the Poet said well of Democritus, etc., of which I understand not the sense, except ye make yourself the summus vir, and us all the Verveces. I suppose this may be the great credit that ye say ye have labored to gain to your nation; to wit to get us all the honrable title of Wedders. No more at present, but hoping this free and ingenuous Letter shal have a good effect upon you (for I am half perswaded, that the flattery of scorners and ignorants, hath brought you to this height of imaginary learning) and that when ye come to yourself ye will thank me for my pains.

I rest your humble servant.'

To this letter Professor Sinclair in his turn very pertinently remarked, that they should not criticise his book till they had seen it, and the St Andrews' teachers were convinced. But unfortunately in the address to the reader with which Professor Sinclair's

Hydrostaticks commences, he gave expression to his wounded feelings.

'When this Book was first committed to the press, I sent an intimation thereof to some of my friends, for their encouragement to it, a practice now common, and commendable which hath not wanted a considerable success, as witness the respect of many worthy persons, to whom I am oblidged. But there is a generation, that rather than they will encourage any new invention, set themselves by all means to detract from it and the authors of it; so grieved are they, that ought of this kind should fall into the hands of any, but their own. And therefore if the Author shall give but the title of New to his invention, though never so deservedly, they fly presently in his throat, like so many Wild-Catts, studying either to ridicule his work altogether—a trade that usually, the person of weakest abilities, and most empty heads, are better at, than learned men; like those schollars, who being nimble in putting tricks, and impostures upon their Condisciples, were dolts, as to their lesson, or else fall upon it with such snarling and carping as discover neither ingenuity, nor ingeniousness, but a sore sickness called, *Envy*.'

Now, indeed, now was the Arch-Bedal justified, and so in hot haste he wrote that stinging book, which purported to be by Patrick Mathers (the Arch-Bedal to the University of St Andrews), but was really by Gregorie, a fact which its erudition must have made clear to Sinclair, even before that kind person, the mutual friend, had confided the fact to him.

The curious thing was that with all his desire to heap ridicule upon his adversary, Gregorie only

touched upon what would naturally now appear the most vulnerable point, the passage about the Devil of Glenluce.

In the meantime the clear air of St Andrews was daily suggesting to him how desirable a place it was in which to teach Astronomy. At night, when he walked over the links, the stars were so clear above him, and the hills so inconsiderable on the horizon, that he felt that nowhere in Scotland was there a site more suitable for an observatory. His idea was cordially agreed to by the University, and sufficient money had been collected by 1673 to admit of the authorities commencing their arrangements. Accordingly Gregorie was commissioned to proceed to the selection of the instruments needed for the carrying out of his plan.

'Commission, University of St Andrews, to Mr James Gregorie, Professor of Mathematics.

'10*th June* 1673.

'Be it knowen to all men be these presents, Us, Rector, Principals, Doctors, and Professors of the University of St Andrews, under subscribing: For as much as we have formerly taken to our serious consideration the great detriment and losse this ancient seminary hath been at in times past, and doeth yet sustain by the want of such proper and necessary instruments and utensils as may serve and conduce for the better, more solemn and famous profession, teaching and improving of Naturall Philosophy and the mathematical sciences, and especially for making such observation on the Heavens and other bodys of this Universe (as easily may be by such helps, with the great advantage of the pure air and other accommodation of

this place) whereby we may be enabled to keep correspondence with learned and inquisitive persones in solide philosophy everywhere, for the forsaid effect: And having purposed (to be forthcoming to our duty and the encouragement of others) to set as effectually as may be about this laudable and necessary work, for providing the forsaids instruments of all kynds, ane observatory, and all other accoutrements requisite for the improvement of the forsaid sciences, the benefite, advantage and delight of youth to be trained up here, the honour of the Kingdom, the reputation of our benefactors, and the lustre and splendour of the University: Did therefore commissionat some of our number to make application unto all persons, whom they knew to be encouragers of learning, and patrons to the professors thereof, representing unto them that we were instantly upon the effectuating of the forsaid designe, And to that end to crave their affections and such other encouragements for the said work as they please to bestow; And to report to us their diligence therein, with the names of our benefactors, to the effect this University may record them, and endeavour to make such respectfull resentments to them and their posterity, as becomes: giving them power to do every other thing proper and requisit in the said affair; They being always answerable and accountable to us anent the premises. And whereas this our laudable designe hath already met with such considerable encouragement from persons of all ranks, that we have ordered Mr James Gregorie, professor of the Mathematical Sciences here to goe to London, and there to provide so far as the money already received from our Benefactors will reach, such instruments and utensils as he with advice of other

skilful persons shall judge most necessary and usefull for the above mentioned design: Like as be these presents we the under subscribers all with one consent constitute the said Mr James our factor for the effect forsaid, Giving and granting him our full power and ample commission for transacting and buying the forsaid instruments in so far as the money forsaid will extend, or as he shall be further furnished by us upon what is to come upon our letters and precepts for that effect: Obliging ourselves to ratifye and approve what the said Mr James should doe in this our commission directed to him by us during his residence there, and to acquit and relieve him of all prejudice he may incur and sustain in execution of this our commission, or any other commission sent by us to him during his residence there: And to take notice of the fabric and form of the most competent observatorye that ours here intended may be builded with all its advantages: And also considering the intended work to be of such moment and expenss, that we ar not able to accomplish it with the contributions of these only who have already listed themselves encouragers of it; Therefore we also by these presents do nominat and constitute the said Mr James Gregorie our factor and special mandator for making application unto all whom he knows to be favourers of learning for their concurrence unto the advancement of the forsd work with full power to do everything proper and requisit in this affair, as others formerly employed therein have been impowered by us to do, He being in like manner accountable to us anent the premisses. As witness these presents, written by William Sanders, one of our number, clerk for the time, and subscrived with our hands in the University

Hall, on the 10th day of June J. m. vjc. seventy three years.

D. Will Comrie, *Provost of St Marie's Colledge*
Ja. Rymer
Edw. Thomson
Ja. Strachane
Jo. Comrie

And. Bruce, *Rector.*
D. Geo. Weemss, *Provost of the Old Colledge.*
D. James Weemss, *Principal of St Leonard's Colledge.*
Jo. Hay.
Alex^r. Grant.
Alex. Skene.
W. Sanders.'

Professor James Gregorie in his search for funds went to Aberdeen, and there he achieved what was quite the most wonderful success of his life—he got a church-door collection in all the churches in Aberdeen to provide for astronomical instruments at St Andrews. Rob Roy need never have taken to the high hand, if he had a tongue at all as persuasive as his great cousin!

Here are the Burgh Records for 15th October 1673.[1]

'15*th Oct.* 1673.

'The said day, Master Alexander Skene, ane of the regents of Saint Andrewes signifying to the councell that Master James Gregorie, professor of Mathematics ther, that ther was ane considerable work intendit in that airt, which before being brought to ane perfectione woulde stand considerable moneyes and that severall incorporations and Universities hade contribuit therto, and seeing the said professor was ane town's man heir, it was expectit

[1] Ane collection to be at the Kirk Dores for the Observatorie at Saint Andrews.

by all concernit, and humblie desyrit be him, that this burgh wold contribute to the furtherance of the said work: All which the councell considering, finds it incumbent upon them not to be wanting for advancement of the said effair in so far as they are lyable, and therfor appoynts ane collectione to be at the Kirk dores . . . the nixt or subsequent Lord's day for the forsaid effect. . . .'

Things were going very smoothly—success was absolutely fawning upon Gregorie—he was getting money as he wanted it, and the instruments he had bought were entirely to his mind; but on his return from London, where he had gone to fulfil his commission, he found everything changed, and his colleagues, who had once been so kindly to him, had ceased to regard him as their friend. He was in the curious situation of being paid by all three colleges, and that in itself would make his position somewhat difficult, but this difficulty had always existed. The real cause of dissension was that in his absence the students had been making popular demonstrations against some of the other teachers, and citing his lectures as opposed to the theories propounded by them. It was most uncomfortable for everybody, and everyone in authority determined to make it most uncomfortable of all for Gregorie. His salary was suspended, the university servants were told to take no notice of his orders, and the students were commanded not to attend his lectures, for certainly the mathematics as taught by him had turned their heads, they had shown distinct signs of madness. The attitude of the professors was not unlike that taken up by the country doctor, who when asked to fill in a form, certifying one of his patients to be

insane, put as evidence observed by himself, 'he called me a fool!'

In the midst of all the turmoil came a flattering invitation to James Gregorie to become Professor of Mathematics in Edinburgh University. After the treatment he had received this was a most blessed chance and with great joy he left St Andrews, and came to Edinburgh,

The whole story was written to James Fraser, then at Paris:—

'MUCH HONOURED SIR,—I received some days ago your very obliging letter, and not long after your arrival at Paris I had another from you, to which the truth is I was ashamed to answer, the affairs of the St Andrews Observatory were in such a bad condition, the reason of which was the prejudice the masters of the University did take at the mathematics, because some of their scholars finding their courses and dictates opposed by what they had studied in the mathematics, did mock at their masters, and deride some of them publicly. After this the servants of the college got orders not to wait on me or my observations, my salary was also kept back from me, and scholars of most eminent rank were violently kept from me, contrary to their own and their parents' wills, the masters persuading them that their brains were not able to endure it. These and many other discouragements oblige me to accept of a call here to the College of Edinburgh, where my salary is here double, and my encouragements much greater.'

Gregorie left St Andrews somewhat under a cloud, because, as we have good reason to suppose, he had been

teaching Newton's Philosophy before the Kingdom of Fife was quite ready for it, and because, too, his students had more ardour than wisdom in their minds. But in Edinburgh he had a great reception. The hall where he gave his inaugural address, in November 1674, was crowded, and he was given perfect freedom in what he taught. In his observatory he passed many happy hours, and often at nights he would take his students to look through the telescope at the stars, to find out belted Saturn and Jupiter with his satellites, which was not such a nursery affair then as it is now. These phenomena had only been discovered fifty years before, for let us remember James Gregorie lived in the days of Charles the Second, and just missed by a few years being Samuel Rutherfurd's fellow-citizen in St Andrews.

The last scene in his life comes all too soon, and before he had been a year in Edinburgh his place was vacant On an October evening while he was showing his students the satellites of Jupiter, a sudden blindness came on, and within a few days everything was over. He probably died of Bright's disease.

It seems to us on looking back, as if the active mind had worked too quickly. Gregorie was only thirty-six, but he had already done a full life's work in science. Mengoli, Newton, Huygens, and even Leibnitz (who for some time claimed Gregorie's series for his own) have borne witness to his power. In truth there was something in him that inclined great men to love him, and his mathematics are so deep that it is only the master minds who appreciate him. He was a mathematician for mathematicians.

There are many of Gregorie's letters still extant, and

for the pure pleasure of reading one just as he wrote it, this letter written to the Rev. Coline Campbell is inserted

'St Andrews, 1. *Jan.* 1673.

'Sir,—I received your of the 23rd of December last, and am glad to have the occasion to keep a correspondence with such a knowing person as ye ar. I have not had leasur at this time to satisfie you in your probleme, being drawn away all this afternoon with necessarie affairs: but with the nixt I shall doe my endeavour for I expect not to mak the calculation considerablie short, seing the nature of the question doeth not suffice it. Our bedal his book against Mr Sinclair is come out several weeks ago. No more at present, but being in hast and hoping that ye will be pleased to continue this new correspondence, I rest,

'Your humble servant,

'James Gregorie.

'for Mr Coline Campbell.'

His widow and orphans were granted a pension by Charles II. of £40 a year Scots in recognition of what Gregorie had done in Scotland. No one could be found suitable to succeed him in the Chair of Mathematics at Edinburgh. The authorities waited eight years before they made another appointment; and when the new professor came, he was also a Gregorie, a nephew of the late professor. His own son, too, held a chair, but that was in Aberdeen, and he was a professor of medicine.

CHAPTER IV

DAVID GREGORY, 1661-1708

'Tycho Brahe was also one who used the sword, not to cut into flesh and bone, but to build up a plainer way among all the stars of heaven.'—HANS ANDERSEN.

DAVID GREGORIE was the third son of his father and namefather, the Laird of Kinairdy. He was born in a house without the port in the Upper Kirkgate of Aberdeen, where the tradition of his birth lingered, and was indeed cherished many a year after the boy had grown to manhood, and had left his grey birthplace for the richer lands of the South.

The boy's mother was, it may be remembered, Jean Walker, one of the Orchiston family, and the child was taught from his babyhood loyalty to the Stuarts and a passionate adherence to the episcopal form of church government and teaching, which he carried with him to the grave.

His education he began at the Grammar School, of which Robert Skene was the rector, and afterwards he studied either at Marischal College or King's College. It was at the University of Edinburgh, however, where his uncle had had such a brilliant if short career, that he took his degree as Master of Arts in 1683. He was even as a student a man whose life was commented upon. People talked of his studiousness, of his joyful temper,

and still more of his friendship with Dr Archibald Pitcairne, whose time was coming to make the tongues of Edinburgh wag. They really were wonderful friends. Pitcairne studied everything from sheer love of learning. He was educated in turn for the church, the law, and for medicine, and besides this he made a great excursion into the higher mathematics at the instigation of his friend. David Gregorie, on the other hand, was a pure mathematician, all else in his studies giving way to his love for his dear 'Celestial Physicks.' From his uncle, James, he had inherited a great number of mathematical manuscripts, and this inheritance was regarded by him with the deepest veneration. Some day he would edit all these papers, but meantime many happy hours were spent by these two friends going over the manuscripts. For David Gregorie there was moreover much to delight in, in every fresh discovery that came from the hands of Sir Isaac Newton. Soon he was as ardent an admirer of the philosopher as ever his uncle had been. If he were made a professor, Gregorie thought, he would admit none of the Cartesian fallacies, and already his appointment to the Chair of Mathematics was being discussed. At the age of twenty-two, then, and actually before David Gregorie had got his A.M. degree, he was appointed to this Chair in the Edinburgh University, an office which had not been filled up since his uncle's death. Lectures had been given by a student called John Young, but he was only acting as mathematical tutor, filling the place temporarily, whereas when Gregory was appointed it was as professor, with a salary of £1000 (Scots).

In December he gave his inaugural address in Latin, on an Analysis of Geometrical Progress. The lecture has

been lost, but a volume of notes of his usual course of teaching is preserved in the University Library, and its range is very large. As has already been said, what chiefly distinguished David Gregorie was his appreciation of Newton's ideas. It was his object to bring down the *Principia* to the average level of mathematical minds, and both he and his brother James, who held the corresponding chair at St Andrews, were teaching Newton's philosophy before it was taught at Cambridge. 'It was not long,' says Whiston, 'before I with immense pains, but no assistance, set myself with the utmost zeal to the study of Sir Isaac Newton's wonderful discoveries in his *Philosophiæ Naturalis Principia Mathematica*, one or two of which lectures I had heard him read in the publick schools, though I understood them not at all at that time, being indeed greatly excited thereto by a paper of Dr Gregory's when he was professor in Scotland; wherein he had given the most prodigious commendations to that work, as not only right in all things, but in a manner the effect of a plainly divine genius, and had already caused several of his scholars to keep acts, as we call them, upon several branches of the Newtonian Philosophy, while we at Cambridge, poor wretches, were ignominiously studying the fictitious hypothesis of the Cartesian.'

Voltaire wrote of Sir Isaac Newton, that when he died he had not more than twenty followers in his own country; and, even making allowance for the unfriendly eyes with which the Frenchman regarded his contemporaries, there was probably some truth in the statement. Whiston was professor of mathematics at Cambridge, and writing from that University, where of all places in the world Newton's

doctrines should have been earliest taught, it is curious that he should have to acknowledge that he got his inspiration from Scotland.

In 1684 Professor Gregorie produced his first work, which was entitled *Exercitatio Geometrica de Dimensione Figurarum, sive Specimen Methodi Generalis* [*dimetiendi*] *Quasvis Figuras.* In it he makes much reference to the speculations of his uncle, to whom he was at least partially indebted for his materials, and there is little, if any, original work. The book was not widely read, but it was said to have given 'a public proof of his competency to discharge the duties of the important office to which he had been appointed.'

David Gregorie was appointed in 1683 in the reign of Charles II., but during his six years in the professoriate many changes had come about. William and Mary were on the throne, and not unnaturally it was considered necessary by the new Government that steps should be taken to ascertain the political opinion of those men to whom was entrusted the instruction of the youth of the land.

At Edinburgh,

July iv., MDCXC.

'The Rolls of Parliament called Act for Visitation of Universities, Colledges & Schoolls.

'Our Soveraigne Lord and Lady, the King and Queen's Majesties and the three Estates of Parliament considering how necessarie it is for the advancement of Religion and Learning and for the good of the Church and peace of the Kingdom that the universities, colledges, and schoolls be provided and served with pious, able and qualified professors, principalls, regents, masters, and others bearing

office therein well affected to their Majesties and the established government of Church and State. Therefore their Majesties with advyce of the said three Estates of Parliament, doe statute, ordaine, and enact, that from this time forth, no Professors, Principalls, Regents, Masters, or others bearing office in any university, colledge, or schooll within this Kingdome be either admitted or allowed to continue in the exercise of their saids functions but such as doe acknowledge and profess, and shall subscryve to the confession of faith ratified and approven by this present Parliament, and alsoe sweare and subscryve the oath of allegiance to their Majesties; And withall shall be found to bee of a pious, loyal and peaceable conversation, and of good and sufficient literature and abilities for their rexive Imployments, and submitting to the government of the Church now settled by Law, and albeit it be their Majesties undoubted right and prerogative to name visitors and cause visite the forsaid universities, colledges and schoolls, yet at this tyme their Majesties are pleased to nominate and appoint with advyce and consent forsaid the persons under named, viz., The Duke of Hamilton, Earle of Argyle et alii To meet and visite all universities, colledges and schoolls within this Kingdom, and to take tryall of the present Professors, Principalls, Regents, Masters and others bearing office therein according to the qualifications and rules above mentioned, and such as shall be found to be erroneous, scandalous, negligent, insufficient, or disaffected to their Majestie's Government, or who shall not subscryve the Confession of faith, sweare and subscryve the oath of allegiance and submitt to the government of the Church now settled by Law

to purge out and remove. As alsoe to consider the foundations of the saids Universities colledges and schoolls, with the rents and revenues thereof, and how the same have been administred and manadged and to sett down such rules and methods for the good manadgement thereof for hereafter. As likewise for ordering the saids universities, colledges and schoolls, and the professions and manner of teaching therein and all things else relateng thereto as they shall thinke most meet and convenient according to the foundations thereof, and consistent with the present established government of Church and State. And to the effect that these presents may be more surely execute. Their Majesties with advyce forsaid, doe farther Impower the forsaids persons visitors or their quorum to appoint Committees of such numbers of their own members as they shall thinke fitt to visite the severall Universities and Colledges within this Kingdom, with the Schoolls within the bounds to be designed to them, and that according to such instructions and injunctions as they shall thinke fitt to give them; And to the effect that upon report made be the said Committee to the aforsaid visitors or their quorum they may proceede and conclude thereupon as they shall see cause; And their Majesties appoints the forsaids visitors to meet at Edinburgh upon the twenty third day of July instant for the first dyet of their meeting with power to them to adjourne and appoint their own meetings to such dayes and places as for thereafter they shall judge convenient; And this Commission to endure ay and while their Majesties recall and discharge the same.'

This large commission therefore which was appointed

to deal with the universities and schools in Scotland, met in Edinburgh in the Common Hall under the presidency of the Lord Provost in July 1690.

The Principal, Alexander Monro, was tried first, and a sentence of deprivation was passed upon him, as also upon Dr Strachan, Professor of Divinity. When Gregorie's turn came, he like those who had gone before was accused by men of whose names he was kept in ignorance, whose statements he could but feel were libellous, malicious and false. The lay portion of the commission were inclined to favour him, and when they enquired into his conduct as a teacher, he was able to present an admirable report of his public lessons for three years. At the same time he would not subscribe to the Confession of Faith, and so it came about that when he recommenced his lectures in the ensuing month of December, he did not know whether he was to continue in the possession of his chair, neither were Dr Archibald Pitcairne nor Lord Tarbat, his constant supporters in all this time of trial, able absolutely to reassure him on the point. John Hill Burton, in his chapter on the ecclesiastical settlements says that 'Dr Gregorie, the only truly great man among the Episcopalian professors, was wisely spared.' But for him the suspense and anxiety were very tedious, and he was glad when a prospect opened out before him of quitting the university in which he had been subjected to so much annoyance.

The opening occurred through the resignation of Dr Bernard, Savilian Professor of Astronomy in the University of Oxford, to whose chair Dr Gregorie thought he might aspire. It was of the first importance that he should

receive the support of Sir Isaac Newton in his application, so he went at once to London to be introduced to him. Sir Isaac was much pleased with him, and wrote him a testimonial, dated London, July 1691.

'Being desired by Mr David Gregorie, Mathematic Professor of the Colledge in Edinburgh to testifie my knowledge of him, and having known him by his printed Mathematical performances, and by discoursing with travellers from Scotland, and of late by conversing with him, I do account him one of the most able and judicious Mathematicians of his age now living. He is very well skilled in analysis and geometry, both new and old. He has been conversant in the best writers about astronomy, and understands that science very well. He is not only acquainted with books, but his invention in Mathematical things is also good. He has performed his duty at Edinburgh with credit, as I hear, and advanced the Mathematicks. He is reputed the greatest Mathematician in Scotland, and that deservedly, so far as my knowledge reaches, for I esteem him an ornament to his country, and upon these accounts do recommend him to the duties of the Astronomy Professor into the place in Oxford now vacant.—*sic subscribitur.*

Is. Newton, *Math. Prof., Cantab.*'

Nor did Sir Isaac's kindness end here, for he wrote a letter to Flamsteed, the Astronomer Royal, asking for his influence in the appointment. Flamsteed responded with great kindness, only mentioning the fact that if his old friend Mr Caswell insisted on standing for the vacant chair, he would be obliged to support him. In the end of his letter, Sir Isaac, while mentioning his anxiety to

have Flamsteed's observations on Jupiter and Saturn for the next twelve or fifteen years, adds: 'If you and I live not long enough, Mr Gregorie and Mr Halley are young men,' thus indicating that he thought them fit to carry on his work.

Edmund Halley, who was the other candidate for the professorship of astronomy, had from a scientific point of view stronger claims to the appointment. To him the world is indebted for the publication of Newton's *Principia*, which Halley undertook at his own expense, seeing that the Royal Society made difficulties about the money, and that Newton himself was too poor, and possibly too much engrossed in his study, to take the burden of it on his own shoulders. But Halley was an infidel, and this disqualified him in the eyes of the patrons of the chair. Sir Henry Savile had left his professorships open to candidates of any Christian Nation 'if they were of good report and correct demeanour, eminently skilled in mathematics, possessed of at least a moderate knowledge of the Greek language, and if they had attained the age of twenty-six years.' He had left the election in the hands of the Archbishop of Canterbury, the Lord Chancellor, the Chancellor of the University, the Bishop of London, the Principal Secretary of State, the two Chief Justices, the Chief Baron of the Exchequer and the Dean of Arches. With an electorate composed of such men, Edmund Halley, holding the views which he acknowledged at that time, had no chance of election.

Whiston in his *Memoir* says that 'Bishop Stillingfleet was desired to recommend him at court, but hearing that he was a sceptick, and a banterer of religion, he scrupled

to be concerned, till his chaplain Mr Bentley should talk with him about it, which he did. But Mr Halley was so sincere in his infidelity, that he would not so much as pretend to believe the Christian religion, though he thereby was likely to lose a professorship.'

David Gregorie then (or Gregory, as he now began to call himself), with the support of Sir Isaac Newton, and because of Halley's religious views, was appointed professor.

He had entered at Balliol, was incorporated A.M. on the 6th of February 1692, took the degree of M.D., and was subsequently admitted to the chair.

In the previous year he had been made a Fellow of the Royal Society, and it was not long before he began to contribute to their volumes. He sent in a beautiful solution of the Florentine problem, which Viviani had sent as a challenge to British Mathematicians. His work was masterly, and delighted geometers, and in Oxford he found time to write much more than he had in Scotland, where teaching had always had to come first. He next wrote a defence of his uncle against the Abbé Gallois, who accused him of plagiarising from Roberval, and then followed his work on the properties of the Catenaria or the curve made by a chain fixed at both ends. In the course of this he was the first to observe that, by inverting this curve, the legitimate form of an arch is arrived at.

In 1695 David Gregory married Elizabeth, a daughter of Mr Oliphant of Langton. His marriage is commemorated in a Latin ode written by his friend Anthony Alsop, a student of Christ Church, and published in his works

Shortly after his marriage he brought out his great book, *Catoptricae et Dioptricae Sphericae Elementa*, which turns out for the comfort of the ignorant to be a great work on looking-glasses and lenses.

The book came as a revelation to many men in that day, for in it Gregory tried to simplify his subject, and to make it clear to the many instead of to the few. He was rewarded with praise, and his book was promised immortality. How changed are things in the present day, when to none of our writers will criticism promise celebrity exceeding at the outside two generations. *Keill* blossomed out into poetry: 'It will last as long as the sun and moon endure,' and it is just possible that it may—in the Bodleian Library!—only that was not what Keill meant.[1]

Comparatively unnoticed at the time was a suggestion made in this book about mirrors and lenses with regard to following Nature in the construction of a telescope. It was almost certainly Pitcairne who had explained to Gregory the strange mechanism of the human eye, and how in Nature objects before they fall on the retina pass through both the vitreous humour and the crystalline lens. Gregory pointed out that Nature does nothing in vain, and suggested that, in imitation of Nature, the object glasses of telescopes might be composed of media of different density, and that an instrument made on this principle would probably produce much clearer vision than

[1] John Keill, 1671-1721, was born in Edinburgh. Was Professor of Astronomy at Oxford and an active member of the Royal Society. He died of a 'violent fever' at Oxford on Thursday, August 31st 1721, a few days after entertaining 'the Vice Chancellor and other academic dignitaries at his house in Holywell Street with wine and punch.' He is buried in St Mary's Church.

any then in use. After Dollond had brought out his beautiful achromatic glasses the meaning of Gregory's suggestion became clear, but it is a curious fact that neither James Gregorie, who invented the reflecting telescope, nor David Gregory, who suggested the achromatic telescope, should ever have seen the practical result of their imaginations.

Life in Oxford for Gregory turned out, as is often the case, to be rather different from his anticipations. He had looked forward to years of studious peace; but the reality, while it answered his expectation in giving him much time for study, had surrounded him with men prepared to be unfriendly towards him. 'The Scotchman' received much contumely in Oxford, possibly more than would otherwise have been the case, because he was so well known to the outside world. Some of Hearne's Collections have the full flavour of the sort of annoyance to which he must have been subjected, an annoyance none the less irritating to Gregory because the facts so generally disagreed with the views expressed about him. Compare the two following passages, which are evidently meant to describe the same circumstance.

'In 1702, David Gregory produced at Oxford his most important treatise, *Astronomiae Physicae et Geometricae Elementa*. In this were included several propositions communicated by Newton, being results which their author had not obtained at the time of the publication of the first edition of the *Principia*, but was anxious to bring before the public at once without waiting for the second edition of his own work.' * * *

'It may here likewise be observed that men well skilled in Mathematics scruple not to say that David Gregory

has stole most of his astronomy from Isaac Newton, whom he has mentioned with some little acknowledgment but not so often as he should have done, which, as 'tis said, has put Sir Isaac on a new edition of his *Principia*.'

How different these two stories are it is easy to see, and although Sir Isaac never expressed the sentiments assigned to him by Hearne, nor, it is likely enough, would Gregory ever have this charge made directly to him, yet it is impossible but that the Savilian professor occasionally felt the sting of such mischief-making.

Gregory's great ally was Dr Charlett, the Master of University College, but besides him, he numbered amongst his friends, Halley, who obtained the Savilian Chair of Geometry, Dr Hudson, Dr Smalridge, Dr Wallis and Dr Aldrich, between each of whom and Gregory, Hearne seemed determined to make bad feeling. As was quite natural, these men, working along the same lines, had often to use each other's materials, but Hearne always represented Gregory as pirating the results of their labour without acknowledgment. The statement of his indebtedness, only given once, was petulantly regarded as insufficient, and even inverted commas did not mollify his wrath. In fact, Gregory committed the only sin which Dickens says is unpardonable—he was successful—and the commoner men in Oxford, who could not regard anything Scottish without disapprobation, would not forgive him. When Hearne took exception to 'the Scotchman's Greek' he was on safe ground and no one regretted this more than did Professor Gregory himself, who was held up for ridicule by Hearne because 'men took him for an oracle.' When he commenced the

publication of his edition of the ancient mathematicians, he arranged with Dr Hudson that, while he himself would be responsible for the mathematics, Hudson should see to the correctness of the Greek. In this series too, Gregory and Halley undertook an edition of the Conics of Apollonius, but it was not completed till after Gregory's death.

If Gregory was not universally appreciated at Oxford, at the court he was in great favour, probably through the influence of Bishop Burnet, who had been at college with his uncle. He was appointed mathematical preceptor to the Princess Anne's son, the young Duke of Gloucester, and here again, if we are to believe Hearne, the choice of the court was received with universal disapprobation.

His honours, however, were only enjoyed in anticipation, for the boy died before his duties as tutor had commenced.

Gregory was now busy trying to compass some reformations in the Oxford curriculum. He drew up a new scheme for an under-graduate's course of study, which was sent by Dr Charlett for Mr Pepys' approval. 'I send you enclosed a scheme of David Gregory's not yet in any other hand, with a desire that you would, with the freedom of a man of honour and a scholar, examine, correct, alter and improve it, as may make the design most beneficial to youth (especially of the Nobility and Gentry) and redound most to the honour of the University and our Professors and the promotion of learning.'

Gregory's plan was that the teaching should be given in English, which was certainly a sensible proposal, that the under-graduates should study some Euclid, trigonometry, algebra, mechanics, catoptrics, and dioptrics, astronomy, the theory of the planets and navigation.

'The teacher,' he said, 'should be always ready to gratify the request of those who desire his instruction. If possible, the students should have a printed book on the subject; if not, the lecturer will take care timeously to give those of the class proper notes to be written by them. And lastly, if any students were found hungering and thirsting, they were to be given regular demonstrations of the operations of integers, or fractions, vulgar or decimal—when they pleased.' As to the proper numbers for a class, Gregory said they should be not less than ten and not more than twenty. The course here touched on was described very fully in the paper sent to Mr Pepys, and Mr Pepys' answer is rather refreshing.

'Reverend Sir, . . . As little qualified as I truly am, for offering aught upon a scheme digested with the thoughtfulness and skill of its learned author, legible in every line of it, the terms nevertheless wherein you require my opinion and advice concerning it, joined with the dignity of its subject and quality of the persons for whom it is calculated, are so forcible, that I cannot omit observing to you my missing two things. . . . First—*Music*—a science peculiarly productive of a pleasure that no state of life, public or private, secular or sacred, no difference of age or season, no temper of mind, or condition of health exempt from present anguish, nor, lastly, distinction of quality, render either improper, untimely, or unentertaining.[1] My other want is what possibly may be thought of less weight; but what nevertheless holds no lower a place with me on this occasion

[1] Mr Pepys, who, as we know from his Diary as well as from Evelyn, was skilled in music, had thus an opportunity of expressing his views on that subject.

(whether for ornament, delight, solid use, or ease of carriage both at home and abroad), than any other quality a gentleman can bear about him, though none less thought on, or (which is more) of less difficulty in the attaining . . . I mean Perspective: not barely as falling within the explication of vision, or serving only to the laying down of objects of sight, but with the improvement of it, to the enabling our honourable student gracefully to finish and embellish the same, with its just heightenings and shadowings, as far as expressible in black and white; thereby when in foreign travels to know how by his own skill to entertain himself in taking the appearances of all he meets with, as remarkable, whether of palaces or of other fabrics, ruins, fortifications, ports, moles, or other public views.'

Mr Pepys was slightly distressed at the suggestion that English should take the place of Latin as the language in which teaching was given, not because he did not think it necessary, but he was afraid lest the honour of the university should be affected by such a change. Whether these proposals were carried into effect then is uncertain, but the Savilian professor came into closer connection with Mr Pepys during the few years that elapsed before his death, being especially upon one occasion, made the bearer of tender thanks from the university to Mr Pepys, who had commissioned Sir Godfrey Kneller to paint Dr Wallis' portrait for the university. The drawing was done in Dr Gregory's house, where the reverend old man was happy and at his ease, and the picture of him is pleasant. In the list of the persons to whom rings and mourning were presented on the occasion of Mr Pepys' death and funeral, Dr Gregory, Dr Wallis and Dr Charlett, are all

inserted as recipients of the most expensive rings. Others who received tokens of regard, though not such costly ones, were Sir Cloudesly Shovel, and Sir George Rooke; Mr William Penn was honoured with a 20s. ring.

In 1704 Sir Isaac Newton became President of the Royal Society, amidst general content. Prince George of Denmark was interested in astronomy, and only wanted to be shewn how he could most wisely help this science forward; and now thought Sir Isaac, if the prince gave the money, there was no reason why Flamsteed's laborious and accurate observations of the heavens should not be published, for the help of him and all like him, who were studying what Gregory calls 'the Celestial Physicks.' He approached the Astronomer Royal, and after considerable difficulty, persuaded him to draw up an estimate of his observations, which was shewn to the prince. Prince George's decision was made very rapidly, for though he was far from brilliant, (as Charles the Second wittily said, 'I have tried Prince George sober and I have tried him drunk; and drunk or sober there is nothing in him'), he had at least one great merit, that he recognised his own limitations. Feeling that the papers before him conveyed absolutely nothing to his uninstructed mind, he appointed some members of the Royal Society to act as referees and see that the publication of Flamsteed's *Catalogue of the Constellations* was carried out correctly. As referees he nominated Sir Isaac, Dr Gregory, Sir Christopher Wren, Dr Arbuthnot, and the Hon. F. Robarts. Their work proved very laborious: Flamsteed was a delicate, irritable man, and Greenwich in these old coach days was a long way from London; but the referees had made up their minds to carry the business through,

and, as the dispensers of the prince's bounty, and protectors of public interest, they drew up articles binding themselves as well as Flamsteed and the printer to perform their relative obligations. So slow and fretful however was the course of this joint effort, that neither the princely benefactor nor Gregory, whom he had appointed a referee, lived to see the work completed.

Gregory had, in 1702, dedicated his *Book on the Elements of Astronomy*, to the prince, drawing a comparison while he did it between Prince George of Denmark, the patron of science, and that King of Denmark who had so wisely given to the great Danish astronomer, Tycho Brahe, the wonderful observatory of Uraniborg—the city of the heavens.

The Preface of this book begins quaintly with a delicious run of mixed metaphors—'My Design in publishing this Book, was, that the Celestial Physicks, which the most sagacious Kepler had got the scent of, but the Prince of Geometers, Sir Isaac Newton, brought to such a pitch as surprises all the World, might by my Care and Pains in illustrating them, become easier to such as are desirous of being acquainted with Philosophy and Astronomy.' In this book there is a most curious mixture of history, imagination, ideas of Newton's, which the philosopher had communicated to him, and observations. It was of course, as was usual at that time, written in Latin, but Edmund Stone translated it into English in 1726, and this was the book which Samuel Johnson read with so much acceptance in some of his dull days in the Island of Coll. Gregory imagined the stars as they would appear to the inhabitants of the satellites of Jupiter and Saturn, and gave to his book that inexpressible charm of individuality,

so often present in the Gregories' writings, which makes them draw portraits of themselves as they write their books. In this treatise he elucidated the principles of astronomy with all the wonderful improvements made in his day, and Newton himself considered it a masterly explanation in defence of his philosophy.

Every now and then Gregory would go to spend some weeks with his friend at Cambridge. On one of these visits it was that Sir Isaac had occasion to express his views upon the superstitions of the day. He passed a house opposite St John's College, which was supposed to be haunted, and round the doors was collected a crowd not only of undergraduates but of Fellows, and some of them Fellows of Trinity. Noticing that some of the rabble were carrying arms, his anger burst out. 'Oh, ye fools,' he said, 'will ye never have any wit? Know ye not that all such things are mere cheats and impostures? Fie! fie! Go home, for shame.'

When Gregory arrived at Cambridge he was always full of messages for Sir Isaac, and when he left, equally so with messages from him. In this way he saw a good deal of all the important mathematicians and astronomers then living in Great Britain, and very likely it added to his already considerable reputation. In 1705 he was elected an Honorary Fellow of the Royal College of Physicians of Edinburgh, and on the 4th of October he took his seat at the Board. This was no doubt an honour obtained for him by his friend Pitcairne, who was then examiner, but Gregory could not spend much time away from England.

When the negotiations for the Union between Scotland and England began, Gregory was appointed along with Paterson, the founder of the Bank of England, to decide

what equivalent was to be paid to Scotland for bearing her share of the debt of England, which was of course afterwards to be considered as the debt of Great Britain. Amongst the many thorny questions which emerged in the course of the deliberations about the Union, there was none about which so many difficulties arose. Sir John Clerk of Penicuik, who had so much to do with the affairs of Scotland at that time, wrote his views upon the criticisms of the general public on this matter.

'Amongst all the articles of the Treaty of Union,' he says, 'there has been none more talked of and less understood than the 15th, concerning the Rise, Nature and Management of the Equivalents.

'Upon this subject those who desired to be thought very wise, of deep understanding, and Great reach of Thought, did vent themselves with a certain Air, as if they pitied the Credulity and Ignorance of the Contrivors, and so had Recourse to the ordinary Refuge of dull People, who think they show their wit by laughing at what they do not understand.'

Of such commentators Gregory no doubt had his share, and the question was one which was of necessity unintelligible to the ordinary mind, but those who were in authority were absolutely satisfied with the manner in which the work was done. It was a long task, and involved many journeys, including one to Scotland, to set things on a proper working basis. Of this prospect he writes to Dr Charlett, the Master of University College.

'LONDON, 20 *June*, 1707.

REVEREND SIR,—The occasion of giving you this present trouble is to recommend to your civility My Lord

Deskford and his Governour. He is son to the Earle of Seafield, Lord Chancellor of Scotland. He is to stay two or three months at Oxford. He has been regularly educated at the University, and has past some time beyond sea. You will find him a sober and grave young Nobleman. You may depend upon it, that he is what you and I wish all such as him in Church affairs and all thereunto belonging. I know I need say no more.

'Though Dr Arbuthnot gott a promise of the N.T. from the Queen, He has not yet gott the book it self. It was forgotten to be laid out before the Queen went to Windsore.

'Before I see you again, I am like to be sent by My Lord Treasurer into Scotland, to see that the Mint there be regulated upon the same foot with that of the Tower, as to the Standart of the Silver and Gold, the Pieces of Moneys, the Weights, the Rateing and Standarding, and the formes and manner of keeping the Books of the Mint, and I have been somewhat taken up with seeing and informing myself of everything of this nature in the Tower. I shall, I hope return before Michaelmass; but if I should be 2 or 3 weeks after the beginning of the Term, I hope you will excuse it, and every body concern'd.

'As for what you propose to be done with the Mulctes, I am very clear for it, Sir Henry Savile's and Dr Wallis's Armes will be very proper.

'I hope to have an occasion to write to you again before I part. I am with all respect and esteem,

'Reverend Sir,

'Your most oblidged and most humble servant,

'D. Gregory.'

When the Union really came, it was very unpopular in Scotland and rather unpopular in England. Dr Arbuthnot published in Edinburgh a pamphlet with the title *A sermon preached to the people at the Mercat Cross of Edinburgh; on the subject of the Union.* In it he forcibly argued against the foolish prejudice of his own country. He pointed out the intimate conjunction between Pride, Poverty and Idleness ('this is a worse union a great deal than that which we are to discourse of at present'). 'Better is he that laboureth,' he said in concluding, 'and aboundeth in all things than he that boasteth himself, and wanteth bread.' The populace, however, was by no means in the humour to be cajoled by any man's wit, and even Dr Arbuthnot, who, according to Samuel Johnson, was the greatest writer of Queen Anne's reign, found himself unable to create anything but ungraciousness.

Dr Arbuthnot was a very constant friend towards Gregory, and the day was fast drawing near when the professor should truly require his help. Symptoms of serious illness appeared in 1708, and Dr Gregory was advised to try the effect of the waters at Bath. He felt himself that his journey would be in vain, and often tried to prepare his wife for his being taken from her very suddenly. There was much to disturb the quietness of his mind, his children were ill in London, and he was full of anxiety for them and yet unable to go to them. After a wretched time at Bath, it was decided that he should return to London, but at Maidenhead he became so ill, that he could not be moved. Dr Arbuthnot, who was sent for from Windsor, found him sinking, and on the 10th of October 1708 he died.

The news was sent to Oxford by this kind physician in a letter to Dr Charlett, Gregory's best friend.

'MAIDENHEAD, GREYHOUND INN,
Tues. 3½ afternoon,
Oct. 10, 1708.

'DEAR SIR,—This gives you the bad news of the death of our dear friend, Dr Gregory, who dy'd about one a clock this afternoon, in this Inn on his way to London from Bath. He sent to me last night to Windsor; I found him in a resolution to go forward to London this morning, from which I happily disswaded [him] finding him in a dying condition. He has a child his only daughter dead at London of the small pox, of which neither he nor his wife knew anything off, for I would not tell them; the rest of his family lye sick of the same disease, so you may easily guess what a disconsolate condition his poor widow must find herself in. She would be glad to see you to advyce about his burying. My present thought and advyce is to bury him at Oxford, where he is known, amongst those who will shew a great deal of respect to his memory, and it is allmost the same distance from this place as London. Mrs Gregory begs the favour to see you here if possible, being one of his most intimate friends, whom he allwayes confided in. I am in great grief and shall stay here as long as I can in hopes of seeing you. If I am not here you will find his brother-in-law, Dr Oliphant.

'I am, Dear Sir,

'Your most humble servant,

'JO. ARBUTHNOTT.'

Dr Smalridge also wrote to him.

'*Oct.* 16*th* 1708.

'REVEREND SIR,—You had sooner heard from me, but that my thoughts of late have been very much discompos'd by Severall Melancholy Objects. On Friday y^e^ last week I lost a dear child, of whom I was extremely fond, and all that knew Him excused me for being so. I find all y^e^ Philosophy I have, little enough to make me easie on this sad Occasion. The Images do at present return thick upon Me, but I hope in a little time to find y^m^ less afflictive. My wound would have been sooner heal'd had it not been kept open by the Occasions I have had to give Others y^t^ comfort which I have wanted myself. On Tuesday I went with Mrs Arbuthnot towards Brentford to meet Dr Gregory and his Wife who were expected that day from Maidenhead. My errand was to inform y^m^ of the death of their Girl, of whom they were extremely fond, they left Her well when they went to y^e^ Bath, and she died on Friday was sennight. We met not y^e^ coach We expected, and when We returned, We found a letter was sent from Mrs Gregory to her brother Dr Oliphant begging y^t^ he would come down to Maidenhead to y^e^ Dr, who was very Ill. She came to Town on Thursday Night a very disconsolate Widow. The Doctor died on Tuesday-morning and was buried on Wednesday-Night at Maidenhead. A messenger was despatched to Hambledon to fetch you to Him, if you had been there. Mr Lesley came from y^e^ Bath with Him and assisted Him in his sickness, and in extremis. Dr Arbuthnot from Windsor came to Him. It seems He always told his Wife that He should be but short-lived, and of late has often desir'd Her to be prepared for his being taken from Her very quickly. When his last Suit of Cloaths was made,

He said He should not live to wear them out. When He went out of Town, He did not expect to come home again alive; and when He left y^e^ Bath to return He thought He should not be able to reach y^e^ town. I am told that He has left his Family in very good Circumstances. I am afraid his tender con[cern] for y^m^ was prejudicial to his Health. He was an affectionate Husband, a tender Father, an excellent Scholar, a man of great Experience and Prudence, of good temper, of sober and religious principles, and One whom those who had the happiness to be acquainted with Him will much miss. I visited y^e^ Widow Yesterday, who bears her Affliction with as much patience and resignation as can be expected. I hope her Husband's Friends will do what they can to make her loss less insupportable.

'I am, Sir

'Your H. Servant

'G. S.'

On her return to Oxford Mrs Gregory put up a monument to her husband's memory in the nave of St Mary's Church. After Professor Gregory's death, Colin Maclaurin published of Gregory's work *A Treatise on Practical Geometry*. The first edition was sold out within a few years, and a second was called for, as this book was in its day used as a text-book in all the Scottish Universities.

Professor Gregory has been accused of spending too little of his time in the observatory, and he was undoubtedly greater as a mathematician than as an astronomer. It was as a pure mathematician that he held the high place which was his in the eighteenth century.

CHAPTER V

DAVID GREGORY, 1696-1767

'The picture of the . . . Dean seems a true one.'
—W. M. THACKERAY.

OF the four children who survived Professor David Gregory, there was only one who inherited his taste for learning. This was his name son David, the eldest of his children. The son's gifts were not those of his father; he was poetical, artistic, a student of history, who never wrote upon the subject, a man in fact who had more of a woman's cleverness than a man's; and looking back on him, his greatest power seems to have been that faculty, which is not to be gained in any school—the monarchial gift of leading. Everything which his hand touched was blessed in his very touch, and through his life, as he passed along his way, adorning different offices and positions of growing importance, there was always some token left behind him that David Gregory's order-loving eye had rested there—the gardens had fresh flowers, halls were beautified by statues, libraries became more spacious, and hospitals were renewed in the same spirit of devotion which had long before inspired the gracious givers.

David Gregory was born in Oxford on the 14th of July 1696. He was educated at Westminster School, of which he was a scholar, and there among the grey shadows of

London this æsthetic little boy first learned the fascination of history. There too he may have learned another thing, his admiration for kings and queens, for he knew that the school owed its foundation to the most picturesque queen that has ever reigned over England, in whose day by the mercy of providence, more even than by the queen's wisdom, England became the mistress of the seas.

From Westminster he was elected to a studentship at Christ Church, and in due course he took holy orders, and became the Rector of Semly in Wiltshire. It was not long, however, before he was back again in Oxford, for George I. upon his foundation in 1723 of the professorship of Modern History (with which at that time the modern languages were associated) appointed David Gregory to the chair. He was thus the first Professor of Modern History at Oxford. Of his work as a lecturer there is no record, but that he was thorough and painstaking no one can doubt; for realising that the amount of work was too large for one man to accomplish, he introduced several foreigners as teachers of their own language, and until such time as they were self-supporting he provided for them out of his own salary. Fortunately his chair was a lucrative one.

He took the degree of B.D. on March 13, 1731, and that of D.D. on the 7th of July of the following year, and four years later he was appointed Canon of Christ Church. On undertaking this office he resigned his professorship.

While he was canon, it was one of his most congenial tasks to superintend the restoration of the Great Hall, and before it was completed, he presented busts of his early patron George I. and of George II., who was then

on the throne. The new library was also finished under his care, and the interior, with its graceful pillars, its delicately moulded roof and wide windows, was executed entirely according to his taste, and under his personal supervision. Little did he think as he guided the placing of the volumes, how one day his own beautiful collection of books would take its place there out of the reach of his son's creditors. If Dean Gregory had been alive in 1775, the old library, which had been the monastic refectory, would never have been mutilated, as it was, for the accommodation of the Westminster students.

On the 18th of May, 1756, Dr Gregory succeeded Dr Conybeare as Dean of Christ Church. He was in appearance, as in charm and dignity of manner, well suited for such an office. Kind, courtly and genial, it was his pleasure as well as his duty to attend the functions of the university, and in his day he was unsurpassed in Oxford society. He was not very learned, but he was a man of the world, and the Earl of Shelburne, who thought it worth while to write some memories of the sleepy Oxford, in which Dean Gregory took so important a part, describes the dean as the kind soul that he was. 'Dr Gregory succeeded Dr Conybeare and was very kind to me, conversed familiarly and frequently with me, had kept good company, was a gentleman though not a scholar, and gave me notions of people and things, which were afterwards useful to me.' Such a characterisation might have astonished the dean himself, who would have regretted with mild wrath his kindness to this young malapert, and would no doubt also have gone for the assurance of his learning to those Latin hexameters, which he as a self-made laureate had written at moments of public interest.

One set was upon the death of George I. and the accession of George II., while another poem touched on the death of George II. and the accession of his grandson; they were both considered very scholarly, but, at the best, Oxford in Dean Gregory's days was not so very learned. Of all the heads of colleges, who are put into the guide book to Oxford, used by the tourists of 1760, there is not one, whose name is familiar, unless we count that of Dean Gregory, who also might have passed into oblivion had it not been for his greater father.

The next honour that came to Gregory was his appointment as Prolocutor of the Lower House of Convocation, and later, he became the Master of Sherborne Hospital near Durham. 'Christ's Hospital in Sherburn,' which had originally been founded by Bishop Pudsey between 1181 and 1184, for the benefit of lepers, and had by degrees, as leprosy died out, been turned into an asylum for the aged poor. It had seen many changes, and had from time to time been reformed as abuses came to light. In the reign of Elizabeth, it was appointed that there should be thirty brethren always living there, 'except some there be sometimes absent, by lack of chamber, the lodgings being few.' When therefore Dr Gregory, who was Master from 1760 to 1767, came into power and built a beautiful stone edifice, in which these almsfolk lived, it was a cause of great discontent that he only built rooms for twenty instead of thirty brethren. The Chronicler, however, speaks of Master Gregory in high terms as 'the best of Masters,' even if the conclusion be somewhat equivocal. 'His benevolence,' says he, 'was diffusive and general: Whilst Master of this Hospital, he did not confine the poor old men, as heretofore to the literal

allowance, which, good as it might have been when anciently settled on them by their founder, was now become a sad and scanty pittance; but so far as it was in his power, made them enjoy the sense and spirit of the benefaction. He demolished all the little wretched huts in which they were huddled together before, and erected a handsome commodious stone edifice, making it to consist of twenty different apartments, that each of the old men might have one entirely to himself, and also constructed a large room, in the centre of the building, for their common reception, and comfortably provided it with every necessary accommodation; but it must be remembered that all this was not at his own cost or charge, for he cut down and sold a large wood at Ebchester, belonging to the hospital, more than adequate to the expense, and thereby put something into his own pocket.' What a curious conclusion to the praise of Master Gregory, who, it must be remembered, is at the beginning of the narration called 'the best of Masters!' —to accuse him of putting public charity money into his pocket at the end! If we had to believe it, there would once more be nothing for his character except the extenuating circumstances of his connection with that Highland worthy Rob Roy; but fortunately for the memory of Dean Gregory, there is another biography of him, published not so long after his death, in which it is explicitly said that the dean erected the new buildings at Christ's Hospital at his own expense, and not out of public money, so—

> 'Let us never, never doubt,
> What nobody is sure about.'

Dean Gregory married Lady Mary Grey, the youngest

daughter of Henry Grey, Duke of Kent (whose title died with him). She had much sorrow in her married life, as all her sons turned out badly, and if the people of her own day were as frank in their views about the dean and his wife, as one writer was in the beginning of this century, she must have felt her responsibility. 'He had three sons,' says this nameless chronicler, 'who being by their mother connected with the English aristocracy, took to horses and dogs, and soon died out.' Probably it was in his very gentleness that the kind old dean failed towards his sons, for he had such a horror of distress, that he could not bring it upon his children, however much they deserved it. They were a great scandal, and were, too, if one comes to think of it, the only failure in their father's life. As a parent he is highly extolled by an anonymous writer, and, this in itself is touching enough, showing that his love was of the sort that disappointment cannot kill, and that in their very weakness he did not give them up. Possibly life did teach him to mistrust his sons, for he left his valuable library, in the event of none of his children following a learned calling, to his nephew, Dr James Gregory of Edinburgh. The will was badly worded, so that Professor James Gregory's claim had to be disregarded, but the books were at all events not seized by his sons' creditors, and they remained in the custody of Christ Church, and may now be found in the uppermost chamber of the closely locked Wake archives.

David Gregory's character was one which was much considered and criticised. Some of his contemporaries would allow him no good point, while others pronounced eulogies on his every action. One such eulogy, written with no great literary skill, was perhaps the work of an

intimate acquaintance, stung into reply by the many attacks upon the memory of his friend. Of his social character this unknown biographer writes, 'That cheerful, easy affability for which he was so remarkably distinguished, gained him the love and affection of all around him, which contributed very considerably to his institutions taking root so readily, and in so short a time flourishing so successfully: abroad he conducted himself with that dignity which his situation as governor of a great college necessarily required; though, under his own roof, he stripped himself of it all, and became, to everyone indiscriminately, the easy and familiar companion: he conducted himself in short, throughout, in such an admirable manner, that he was not only loved and esteemed, but honoured and respected; and as he was in his life most sincerely valued, so was he in his death truly and universally lamented.'

There is no doubt that Gregory was a popular dean. He was, like so many of the Deans of Christ Church, a Westminster student, and his appointment, moreover, was all the more acceptable because he came immediately after Dr Conybeare, the only non-Christ-Church man that has ever held that office.

In his days the whole university was rather unillumined, and Christ Church was no exception. Lord Shelburne, referring only to his own college, says it was very low, and as a proof of his statement adds that 'no one who was there in my time has made much figure either as a public man or man of letters.' But Gregory did his work well as far as in him lay; he died in 1767 at a ripe old age, in much honour, in much affection, and now lies buried beside his wife in Christ Church Cathedral.

CHAPTER VI

JAMES GREGORIE, 1666-1742; CHARLES GREGORIE, 1681-1754; DAVID GREGORIE, 1712-1765

'The City of the Scarlet Gown'—ANDREW LANG.

At Kinairdy on the 29th of April 1666 a fifth son was born to David Gregorie. This was James, of whom probably because he was only one among many, there is no individual record till his name occurs in the list of the graduates in Arts in the Edinburgh University in May 1685. The likelihood is that his early education was given him by his father, who, notwithstanding his work as an amateur physician, found time to superintend the studies of his children. Little is known of their college friends, but Archibald Pitcairne, who afterwards became the Professor of Medicine, first in Edinburgh and then in Leyden, was constantly with them, and many happy vacations spent at Kinairdy were made merrier by his society.

Shortly after James Gregorie graduated, and when he was certainly not more than twenty, he was appointed to the Chair of Philosophy in St Andrews. In his teaching he was able and thorough, if not brilliant. Like his elder brother, he was much in advance of his age, and like him too was giving expression to the Newtonian Philosophy before it had been 'as much as heard of' in

Cambridge. There is extant a thesis by this Professor James Gregorie dedicated to Viscount Tarbat, in which after a list of scholars, candidates for the degree of A.M., there follow twenty-five propositions, most of which are a compendium of Newton's *Principia*. The other three relate to Logic, and the abuse of it in the Aristotelian and Cartesian Philosophy. His definition of logic is 'the art of making a proper use of things granted in order to find what is sought.' This was published in 1690.

Professor Gregorie occupied the Chair of Philosophy at St Andrews until the Revolution, but then his love for the discrowned king compelled him to resign. He could not bring himself to take the oath of allegiance to William and Mary, and thus for a few years he was without any settled work. Happily for him, however, David his elder brother was in 1692, by the influence of Sir Isaac Newton, made Savilian Professor of Astronomy at Oxford, thus leaving a vacancy in the Chair of Mathematics at Edinburgh. He, too, had been somewhat under a cloud because of his love for the Stuarts, and although his greatness had prevented the party which was in power from ejecting him from his post, yet his life had been made sufficiently uncomfortable for him.

But now things were changed. Feeling was no longer hot and bitter, and James succeeded to his chair in 1692, with a prospect of a long and quiet tenure of it. At the time of his election the College revenues were low, and he had to accept the chair on a diminished salary of nine hundred merks, or £50 sterling, in addition to the students' fees. In the end Gregorie certainly got his money's worth out of the university,

for he retired at fifty-nine, owing to age and infirmity, and then lived for seventeen years, during which time Colin Maclaurin, who had been made joint-professor with him, got no salary. His case was indeed a piteous one, and Sir Isaac Newton made him a yearly allowance of £20, towards providing for him, 'till Mr Gregorie's place became void.' The entries in the Records of Marischal College, Aberdeen, concerning Maclaurin's conduct there, or rather not there, are quaint.

'*December* 23, 1724.—On consideration that M'Laurine has been abroad and not attended to his charge for near thir three years the Council appoint Mr Daniel Gordon, one of the regents "who had formerly taught Mathematicks at the University of St Andrews" to teach the class during the current session.'

'*January* 20, 1725.—M'Laurine having returned a Committee is appointed to confer with him anent: 1st, his going away without Liberty from the Counsell. 2nd, His being so long absent from his charge.'

'*April* 27, 1725.—M'Laurine appears before the Council, expresses regret, and is reponed.'

'*January* 12, 1726.—The Council, learning "by the Publict News Prints" that M'Laurine has been admitted conjunct professor with Mr James Gregorie in the University of Edinburgh, declare his office vacant.'

It is a question whether there were not times when Colin Maclaurin thought that the safe salary which he would have enjoyed at Marischal College might have been preferable to his Edinburgh post, notwithstanding the greater intercourse which he now had with the world of science, but if so, there was no turning back.

Professor Gregorie married on the 4th September

1698, Barbara, a daughter of Charles Oliphant of Langton, and a sister of his brother David's wife. A great gloom was cast upon their home life by the early death of one of his daughters. She had an unhappy love affair, and is said to have died of a broken heart. Whether this was so or not, her story furnished the subject of Mallet's ballad, 'William and Margaret.'

'Twas at the silent solemn hour,
When night and morning meet;
In glided Margaret's grimly ghost,
And stood at William's feet.

Her face was like an April morn,
Clad in a wintry cloud:
And clay cold was her lily hand
That held her sable shroud.

So shall the fairest face appear
When youth and years are flown,
Such is the robe that kings must wear
When death has reft their crown.

Her bloom was like the springing flower
That sips the silver dew,
The rose was budded in her cheek,
Just opening to the view.

But love had, like the canker worm,
Consumed her early prime:
The rose grew pale, and left her cheek;
She died before her time.

Awake, she cried, thy true love calls,
Come from her midnight grave;
Now let thy pity hear the maid
Thy love refused to save.

This is the dumb and dreary hour
When injured ghosts complain;
Now yawning graves give up their dead
To haunt the faithless swain.

Bethink thee, William, of thy fault,
  Thy pledge and broken oath ;
And give me back my maiden vow,
  And give me back my troth.

Why did you promise love to me
  And not that promise keep ?
Why did you swear mine eyes were bright
  Yet leave those eyes to weep ?

How could you say my face was fair
  And yet that face forsake ?
How could you win my virgin heart
  Yet leave that heart to break ?

Why did you say my lip was sweet
  And made the scarlet pale ?
And why did I, young witless maid,
  Believe the flattering tale ?

That face alas no more is fair,
  These lips no longer red ;
Dark are my eyes, now closed in death,
  And every charm is fled.

The hungry worm my sister is ;
  This winding sheet I wear ;
And cold and weary lasts our night
  Till that last morn appear.

But hark the cock has warned me hence,
  A long and last adieu !
Come see, false man, how low she lies
  Who dy'd for love of you.

The lark sung loud, the morning smiled
  With beams of rosy red :
Pale William shook in every limb
  And raving left his bed.

He hyed him to the fatal place,
  Where Margaret's body lay ;
And stretched him on the grass green turf
  That wrapt her breathless clay.

And thrice he called on Margaret's name
And thrice he wept full sore,
Then laid his cheek to her cold grave
And word spake never more.'

The author of this poem was not only a M'Gregor, but like the Gregories, a M'Gregor of Roro, and though he had changed his name, as did so many members of that unfortunate clan, the tradition was always kept up in his family.

Charles Gregorie, a half brother of Professor James, who was for a time Snell Exhibitioner at Balliol, was created by Queen Anne in 1707 Professor of Mathematics at St Andrews, which chair he held for thirty-two years until such time as his son could be appointed in his stead. He was quiet, studious, and able, but little is known of him.

David Gregorie, who succeeded him, does not bear quite so gentle a character, but he was a much abler man and one who could make his personality felt wherever he went.

After his own schooldays were over, he became tutor to the sons of the Duke of Gordon with whom he was connected through his grandmother. In this way he passed several years of his life before he was appointed to the Mathematical Chair. As a professor he was very popular, and if he tried to extend his influence beyond his class-room, he meant nothing but kindness. This was not always understood. One of his students wrote an autobiography, in which he described the ardour with which Mr Gregorie insisted that he should attend the services at the church—ardour for which Mr. Stockdale was not grateful and to requite which he put the pro-

fessor's name into his 'immortal' autobiography as that of a bigot, who had compelled him to attend the kirk. Thomas Reid, when studying his cousin's character and especially his whiggery and Presbyterianism, so curiously unlike the rest of his family, remembered that he, like himself, was descended from the second wife of David Gregorie of Kinairdy, and had inherited her principles both in religion and politics.

There is another incident in his life more likely to recall those of his connections who bore the name of M'Gregor, and the record of it seems odd enough and old-world enough in our eyes. The report is that of a lawsuit which the professor had against Mr Wemyss of Lathockar. Gregorie, it seems, who loved sport, was 'hunting for partridges' over the broad meadowlands of Leuchars. He was accompanied by a man called Baird, who carried a second gun for Professor Gregorie. Suddenly Mr Wemyss sprang upon this man and seizing his gun refused to return it. The professor was furious—Baird was carrying a second gun for him, he was no common fowler, no higgler from whom a gun could rightly be taken; but Mr Wemyss was obdurate and went away with the gun, and nine-tenths of the law in his favour. And now there was no possible remedy but the courts, and in due course, the matter came up before the Sheriff. Gregorie claimed the restitution of his gun, and damages for the way in which he had been treated. As regards his first request, his claim was granted, but on the second point the judgment was not so favourable for—is it possible?—there was a doubt in the Sheriff's mind as to whether Gregorie himself had a right to be shooting over the grounds of Leuchars. It had ceased to be a question

only concerning Baird, and in the end, the Professor of Mathematics in St Andrew's University was refused damages on the ground that he himself was poaching![1] The owner of Leuchars was a minor, and as one of his tutors Professor Gregorie had never doubted his right to shoot over the estate, but he went back to St Andrew's with new ideas on the limitations of his privilege.

His life ended in 1765, when he was only fifty-three. He published one book, which was a Compendium of Algebra—an excellent text-book, said Thomas Reid his cousin, and then added a description of the professor which if not very interesting is still a portrait, drawn from life: 'a well-bred, sensible gentleman, and much esteemed as a laborious and excellent teacher.'

[1] Robert Fergusson the poet, wrote a poem in the Scots dialect, on the death of this Professor David Gregorie.

CHAPTER VII

JAMES GREGORIE, 1674-1733
JAMES GREGORIE, 1707-1755

'There's an old University town
Between the Don and the Dee,
Looking over the grey sand dunes,
Looking out on the cold North Sea.'

—Dr W. C. Smith.

After her husband's sudden death[1] Mrs James Gregorie returned to Aberdeen. She did not wish to live in Edinburgh, which was now so full of sad memories for her, and in the streets of which she had not had time to become more than a wayfarer. She had shared Professor Gregorie's brilliant popularity, but the round of gaiety had brought them intimate acquaintances rather than friends, and in her desolation her heart turned to the home of her childhood, and back to the more kindly north she took her three children, her two little girls and James about whom this chapter is written. Thus it came that this boy was brought up, like the generation before him, at the Grammar School of Aberdeen.

It was a good school, and did much for its boys, beating education into them if they would not have it otherwise, and of such discipline little Gregorie, who was no exception to the fiery family temper, no doubt had his share. He passed from school to Aberdeen University and later to Edinburgh,

[1] Professor James Gregorie. *Cf.* Chapter III.

but when he inclined to become a doctor, it was decided that he should go abroad and get a French degree, an arrrangement to which he acceded with joy, and in 1696 at the age of twenty-two he set out for a time on the continent. Once away from home, with no one to consider but himself, he turned to what was really the centre of greatest interest in Flanders—the camp of William III. Merry were the days he passed there and full of excitement, so that perhaps there was one person who was only half glad when the Peace of Ryswick brought the war in Flanders to an end.

But it was better for his work that he should go further afield. On therefore he went, lingering first at Utrecht, then at Paris before he reached Rheims, where he secured his degree in September 1698. How much study Gregorie put into these years it is impossible to ascertain. Medicine, and more especially surgery, were pretty barbaric arts in those days, but this student, it should be remembered, was always a Gregorie, and could not but learn.

Just before he came back to England he spent a few weeks in the French camp, and after this he accepted an invitation to take a practice at Chelmsford, Essex. But alas! James Gregorie found that he could not settle down to a country life, and so to the regret of his patients he took a hurried farewell of them, and went back to that town from which his forbears had come—to the grey city 'looking out on the cold North Sea.'

There is no place in the world to be compared with the old mother city of Aberdeen for the love in which her children hold her. Wherever they go she is still their home, and from between her guardian rivers she watches her sons as they go forth and is glad over their success.

So it was in the past, so is it now, and so may it be while the world lasts.

In the beginning of the eighteenth century Aberdeen was by no means a dull place, and indeed Dr Gregorie, one suspects, may sometimes have wished it to be duller, as for example when Rob Roy during the brief time of his success was raising recruits for the Jacobite cause amongst his clansmen there. The Earl of Mar, into whose hands the perfidy of Montrose had thrown Rob Roy, had requested him to bring as many of his clansmen into the Stuart camp as he could muster. While he was occupied with this task, he lived with Dr Gregorie, for, however much the physician may have deplored his connection with that too notorious person, he could never afford to neglect him; and the charm of the Gregorie household so fell upon the big, warm-hearted outlaw, that in a burst of kindness and enthusiasm he offered to take Dr Gregorie's little son and 'mak a man o' him.'[1] Rob Roy thought him far too good to waste upon doctoring, and if the sunny child had got his way, he would have followed the cateran in that delicious life of adventure which he painted —a life of hunting and fighting and success.

But Dr Gregorie was much alarmed; he must not offend his cousin, not only because he loved him, but because they were all alike quick in anger, and a cold answer might have been answered by yet colder steel. He could not trouble him with the youth's education, and he had only been trained in the Lowlands, and was not at all what a Highland boy of his years would be, said the doctor, but all this depreciation only made Rob Roy the

[1] Scene imitated by Scott, in Bailie Nicol Jarvie's offer to take Rob's sons James and Robert to apprentice.—*Rob Roy*, Ch. xxxiv.

keener to be friendly; and at last when every other excuse had failed, the doctor shook his head and confessed that the child was too delicate and would not live through a Highland winter. So, full of compassion one for another the cousins parted, their roads ran far apart; Rob Roy came to his end claymore in hand listening to the dirge 'Cha till mi tuillidh' (we return no more), while for the doctor there was a career of steady success and a peaceful ending in the sweet house in the middle of the herb garden.

Rob Roy had said he would come back and fetch the child when he was older and stronger, but likely enough when the cousins met again the chieftain could not advise any man to become his follower. Once again we see them, Rob Roy walking arm in arm with his kinsman the Professor of Medicine, down the Castle Street in Aberdeen, when suddenly the drums beat to arms, and the soldiers begin to issue from the barracks. 'If these lads are turning out, it is time for me to look after my safety,' said Rob Roy, as he slowly shook hands, and turning down one of the neighbouring closes was seen no more. After telling this story, Sir Walter Scott added: 'The first of these anecdotes which brings the highest pitch of civilization so closely in contact with the half savage state of society, I have heard told by the late distinguished Dr Gregory (James Gregory, Professor of Practice of Physic in Edinburgh), and the members of his family have had the kindness to collate the story with recollections and family documents, and furnish the authentic particulars. The second rests on the recollection of an old man, who was present when Rob Roy took French leave of his literary cousin on hearing the drums beat,

and communicated the circumstance to Mr Alexander Forbes, a connection of Dr Gregory by marriage.'

There is also a gossiping paragraph about this Dr Gregorie, or rather about his house, in Orem's description of Old Aberdeen, written after he was made Mediciner in King's College, a post to which he was appointed in 1725.

'Dr Gregorie hath repaired his lodging belonging to the college anno 1727; and hath built to it a toofall, for giving it a better entry to the rooms than it had formerly, in which toofall he hath a little room for a study, and a little room below it beside the staircase. He hath also repaired the garden dyke and hath begun to enclose his glebe, a part wherof he hath enclosed with a stone dyke, and planted it within the aforsaid year, and hath enclosed the rest of his forsaid glebe this year 1728.'

The scene rises before us of the physician taking his interested friend, the town clerk, over his house and grounds. It sounds most attractive, both the front-hall and the study, and certainly the visitor appreciated everything when he took the trouble to write it down in his book. Gregorie also improved the salmon-fishing in the Don by building a stone rampart across the river which was called 'Gregorie's Dyke' and can still be seen from the Bridge of Don. In return for this, 'a half-net's fishing' was granted to him and his heirs for ever, and this has now devolved upon a descendant of Dr James Gregorie.

When Gregorie was made mediciner he was no longer young, but there was little in his new position to call for energy; for, although the University of King's College of Aberdeen, had been the first to institute a Chair of Medicine, the teaching of the subject was somewhat

fitful. His predecessor Professor Urquhart had given some 'Publick Lessons' on this subject, but no where is it mentioned that either Dr James Gregorie or his son followed his example. Their work consisted chiefly in deciding which candidates were to be granted the M.D. degree, and in taking a share in the university life. The mediciner was not a regent and was thus saved the continuous worry and supervision which fell to the lot of most of the professors.

As for the giving of degrees it was almost entirely a personal affair, and a doctor of medicine did not by any means need to know much of his subject. If he were desirable and willing to pay the fees, the mediciner had the right to grant him a diploma; in some cases even the fee was dispensed with. For example, there is the following entry in the Records of the University and King's College.

'8th September, 1701.

'Mr George Cheyne allowed to be graduat doctor in medicine *gratis*, because he's not onely our owne countryman, and at present not rich, but is recommended by the ablest and most learned physitians in Edinburgh as one of the best mathematicians in Europe; and for his skill in medicine he hath given a sufficient indication of that by his learned tractat de Febribus, which hath made him famous abroad as well as at home; and he being just now goeing to England upon invitation of some of the members of the Royal Society.'

The affairs of King's College left much to be desired at this time. As early as 1709, there had been friction between the professors and students, the latter of whom

described their professors as 'the useless, needless, headless, defective, elective Masters of the K. Colledge of Abd,' and matters did not improve much in the intervening years; for, when Professor James Gregorie's son was mediciner, things had come to such a pass that the university had to make special and almost pathetic efforts to secure students.

'23rd October, 1738.

'It being represented to the university, that the want of an accomplished gentlewoman for teaching white and coloured seam, was an occasion of several gentlemen's sons being kept from this college, their parents inclining to send them, where they might have suitable education for their daughters also; and that one Mrs Cuthbert, now residing in this town, had given sufficient proof of her capacity and diligence . . . the university judged it reasonable . . . to advance her twelve pounds Scots, out of the revenue belonging to the college for the ensuing year.' After this mention, Mrs Cuthbert passes quite out of the University Records, so we do not know whether the housewifely efforts of the authorities of the university were successful.

James Gregorie as mediciner received a salary of 180 pounds Scots, 26 bolls bear, 18 bolls meal; and on his resigning his chair on the 20th December 1732, his son James was *eo die* appointed to fill the vacancy, to receive in his turn this munificent salary, and to live in the fascinating manse.

Dr Gregorie married first, Catherine, second daughter of Sir John Forbes of Monymusk, but she died young; his second wife was a daughter of Principal Chalmers (one of

the family who founded the *Aberdeen Journal*), and we can imagine a little joint influence on the part of the Dean of Faculty and the Principal of King's College bringing about this desired election, for we never hear that the third Professor James ever did anything to make his name live. It was to be left to his stepbrother to carry on the tradition of the family, but John Gregorie was only a child when his father died.

Dr James Gregorie, the mediciner, died in January 1733.

In many ways he was among the least distinguished of his family. He stands there in a misty crowd of the educational magnates of a very far past time, surrounded by the canonist, the civilist and other obsolete dignitaries, and all he leaves is an impression of content and of diplomatic gifts, which show themselves whenever he rises out of obscurity. This diplomacy, which when it is used in domestic affairs is called by the Scotch 'canniness,' was passed on in the family along with the gout which came from the Chalmerses, and the combination was curious. Later on James Gregorie, the cousin of Rob Roy, was recognised as the founder of the Aberdeen School of Medicine.

His son, Professor James Gregorie, was professor from 1732 to 1755. He was delicate and irritable, and his friends had a standing joke whenever he was cross, which probably palled upon him after a certain time. 'Ah,' they would say, 'this comes of not being educated by Rob Roy.' They, at least, thought this extremely witty.

Dr Gregorie married Helen Burnet, who was a connection of his own, one of the Burnets of Elrick. They had no children. He died on the 18th of November 1755.

CHAPTER VIII

JOHN GREGORY, 1724-1773

'The good-natured size of his person and set of his face, seem to show that Philosophy is not the thing of toil and anguish it once was to men.'—ROBERT W. BARBOUR.

FROM an Aberdeen education at the Grammar School to begin with, and afterwards at King's College, where he learned his Latinity, John Gregory came to Edinburgh in 1742. He came with his mother to look after him, who, poor soul, was haunted by the remembrance of his brother George's early death, and would hardly let John out of her sight. Both of the boy's guardians had agreed that for a medical education he must attend Edinburgh University. His brother, the mediciner in Aberdeen, never seems to have suggested that he should stay there, where there was really no systematic teaching of medicine, nor did his grandfather, Principal Chalmers, the Principal of King's College.

To begin his study at Edinburgh, to continue it at Leyden, was the best suggestion that they could offer him, and it turned out excellently.

His professors in Edinburgh were Professor Monro, (the first), who daily strove to make dry bones live, and succeeded; Professor Sinclair, who expressed Boerhaave's teaching in his own very beautiful Latin; Dr Rutherford, the grandfather of Sir Walter Scott, who taught

the Practice of Physic, and Dr Alston, the strangeness of whose prescriptions makes it possible for us to grasp what an advance Cullen and Gregory accomplished in medicine. These were very nearly the same professors as lectured when Goldsmith attended the university some ten years afterwards, and he did not think much of any of them, except Professor Monro, to whom he gave his heart's admiration. 'This man,' he wrote, 'has brought the science he teaches to as much perfection as it is capable of; 'tis he, I may venture to say, that draws hither such a number of students from most parts of the world, even from Russia.'

As for Professor Alston, he has left behind him the notes of his lectures, and they are very curious, though not laughable, for after all it was what everyone believed in those days. 'Earthworms, large and fat ones especially, were dried and used in cases of jaundice and gout: the juice of slaters passed through a muslin bag was recommended for cancer, convulsions and headache.' But, all the same, think of John Gregory taking notes of such teaching, sitting up late at night to write down how vipers must be used for ague and small-pox, and picture his watching the cure of the lady with a headache who could be induced to drink the wood-lice-juice. No wonder she was cured when you think what faith she must have brought to her physician.

Though these notes from Alston's lectures seem only worthy of a medicine-man, there was yet throughout the university an awakening spirit of life and of enquiry. The Royal Medical Society, which Cullen had founded in 1735, and which John Gregory attended in 1742, was the scene of the most lively debates upon every subject

in medicine and philosophy. Little was taken for granted, and everything was questioned. In Gregory's year its charm was greatly enhanced by the presence of Mark Akenside, who was a member, and the best company possible. Amusing, poetical, his oratory drew many persons to the Society. Robertson, the historian, came every night when Akenside was going to speak, and the racy talk was enjoyed by him almost as much as it was by the speakers.

Gregory spent three years in Edinburgh at this time, and then went to Leyden to study under Albinus, Gaubius, and Van Royen. Albinus was an anatomist. His engravings were much clearer than those procured by anyone else at that time, but he was not a great lecturer, only painstaking and observant. In Gaubius, however, the university had a strong man, a vivid teacher, and an original thinker, and if Gregory had needed inspiration, he would have found it in his teaching.

To John Gregory Holland was delightful country when contrasted with the cold east of Scotland, where even the roads were almost impassable in bad weather. In Holland he made his way along sunlit canals, through villages gay with gardens, and when he reached Leyden his enjoyment was complete.

Full of delight he went about the quiet squares of the university town, along the banks of the old Rhine, and round the path on the top of the wall. Everything was new, and everything was foreign. He chose rooms for himself at a well-known lodging on the Long Bridge. Mademoiselle van der Tasse arranged her house especially for Englishmen. It paid her better, and besides, the fat little Frenchwoman could talk English, and knew how to please, and

her coffee was famous in the town. Gregory's companions in Leyden were Alexander Carlyle, afterwards minister of Inveresk, Dr Nicholas Monckly, Charles Townshend, John Wilkes, and a few Scotsmen. Some of them were studying law, some divinity, and the others medicine. But alas for the great fame of Albinus and Van Royen. 'I asked Gregory,' wrote Alexander Carlyle, 'why he did not attend the lectures,' which he answered by asking in his turn why I did not attend the divinity professors. 'Having heard all they could say in a much better form at home, we went but rarely, and for form's sake only to hear the Dutchmen.' So after all it was not the Professors of Leyden that taught John Gregory so much. Albinus was no doubt worthy, but in his portrait he looks a little dead, a little like a mummy. He looks as if he had forgotten that men were anything more than bones.

The students who most enlivened the university were Charles Townshend and Wilkes, both of whom became notorious in after life, Townshend as a statesman, and Wilkes as Wilkes. On the first Sunday after Carlyle joined the party at Leyden, Gregory took him out for a walk along the Cingle, and introduced him to the English colony. As Wilkes drew near the newcomer asked eagerly about him. His face was so remarkable, not only for its ugliness, but for its self-assurance and interest, that no one could pass him without notice. Gregory's answer was that 'he was the son of a London distiller or brewer, who wanted to be a fine gentleman and man of taste, which he could never be, for God and Nature had been against him.' And famous and popular as he afterwards became, this estimate of him remained true, for he never succeeded in becoming either a gentleman or a man of taste. What

a clear insight Gregory had, and what a sharp tongue! He carried things all his own way in Holland, but in Edinburgh it was different; there his rapid way of expressing his thoughts even about the things for which he cared most deeply, was often put down to shallowness and hypocrisy.

The conversation among these men was often brilliant, but most of all at their students' supper parties—these Leyden suppers of red herring, eggs and salad. Gregory's great subjects were religion, and the equal, if not superior, talents of women as compared with men. Everybody made fun of him, for 'he could hardly be persuaded to go to church, and there were no women near whom he could have wished to flatter;' but he would not change his mind. Nicholas Monckly was a great friend of Gregory's, but more because it brought him into notice than because of any love. He saw that Gregory could be witty, so he used to talk to him in private about subjects of interest, and then bringing the same matter up for discussion at their evening entertainments, would give out his friend's opinions as if they had been his own. Gregory was much amused with this, and after a few evenings took Carlyle into his confidence, whereupon these two played many pranks upon poor Monckly, leading him out of his depth, or contradicting him. The sport was given up, because the victim was too unconscious of their satire, and when they made their chaff plain, he would come into Gregory's bedroom, and complain even with tears. Wilkes, who tried too, but with greater success, to be a leader among the students, used to leave Leyden when he felt tired of it, and spend a few days in Utrecht with 'Immateriality Baxter.' These two men were really attached to one

another, and what an ideal retreat it was to go to the house of that quaint Scotsman, even though he was in exile. King's College in Aberdeen honoured John Gregory in his absence by sending him the degree of M.D., and thus distinguished, he turned his face again towards home. He, along with Carlyle and Monckly, travelled *via* Helvoet, Harwich, and London. In the boat they found a charming companion in Violetti, who was on her way to fulfil an engagement at the Haymarket Theatre, and to fame. She became Mrs Garrick, and lived happily in her villa, near London, till 1822, but except on the stage, Gregory never saw her again.

Now there happened to John Gregory, what so seldom befalls anyone, that he was put into the right place for him without any effort on his part. When he returned to Aberdeen he was offered the Chair of Philosophy, which meant in those days that he should teach mathematics, natural philosophy and moral philosophy, and be a regent. His former study did not exactly lead to this, and people must sometimes have asked of what use had his apprenticeship to his doctor brother been to him if he were to turn into a philosopher. But there was plenty of time to be several things in the leisurely eighteenth century. That was what John Gregory thought, so from 1747 to 1749 he was a Regent of Philosophy.

Although regents had been abolished both in Edinburgh and Glasgow Universities before 1746, in Aberdeen they were still retained, and from the statement quoted in Mr Rait's book on the Universities of Aberdeen, I take the following paragraph, descriptive of the attitude of King's College in regard to this subject. 'Every Professor of Philosophy in this University is also tutor to those who

study under him, has the whole direction of their studies, the training of their minds, and the oversight of their manners; and it seems to be generally agreed that it must be detrimental to a student to change his tutor every session . . . and though it be allowed that a professor who has only one branch of philosophy for his province, may have more leisure to make improvements in it for the benefit of the learned world, yet it does not seem at all extravagant to suppose that a professor ought to be sufficiently qualified to teach all that his pupils can learn in philosophy in the course of three sessions.' So it was not only to teach, but to train the minds, and 'overlook' the manners of his students, that John Gregory was called. He was the only Gregory who ever was a regent, and he came to his work with a clear insight into students' ways, being indeed hardly more than a student himself. But the life must have been unattractive. To quote from a letter dated September 4th, 1765, from Thomas Reid, who held the Chair of Philosophy shortly after his cousin, which is full of much interesting information as to what the work of a regent was like:—'The students here,' he says, 'have lately been compelled to live within the College. We need but look out at our windows to see when they rise and when they go to bed. They are seen nine or ten times throughout the day statedly, by one or other of the masters —at public prayers, school hours, meals, in their rooms, besides occasional visits which we can make with little trouble to ourselves.'

'They are shut up within walls at 9 at night. This discipline hath indeed taken some pains and resolution, as well as some expense, to establish it.'

Along with this work in King's College, John Gregory engaged in general practice as a physician. He found it very engrossing, much more so than the philosophical teaching which he had to give, and he determined to resign his regentship, and to go abroad for a few months.

On his return he fell in love with the Hon. Elizabeth Forbes, a daughter of William, Lord Forbes. She was a beautiful girl, very clever, and she was besides an heiress, and there is a story that her father did not at all approve of the marriage. 'What do you propose to keep her on?' said he, and Gregory, getting angry, took his lancet out of his pocket, and said, 'on this.' They were married in 1752. Their life was a singularly happy one, to use the expression of their own day, 'they mutually enjoyed a high degree of felicity.' For two years they were in Aberdeen, and then Gregory got impatient of his small practice, for there was only room there for one Dr Gregory, and he made up his mind to seek his fortune in London. This was a step which he was glad of all his days, for it brought him into contact with so many interesting people. 'In London,' says Lord Woodhouselee, he was 'already known by reputation as a man of genius.' How this could be, seeing that he had done little to show his talents, it is difficult to understand. Perhaps some one who knew him in the old Leyden days had spread a report of his brilliancy, or some Aberdonian may have named him as a coming power. However it happened, the effect was most fortunate, for not only was he recognised by the scientific world, and made a Fellow of the Royal Society, but Sir George Lyttelton and Mrs Montague, 'that fascinating humbug,' made friends with him, and whatever Mrs Montague

was to other people, she was most sincerely kind to the Gregories.

These were the days of Samuel Johnson, of Sir Joshua Reynolds and his sister, of Miss Burney, of Garrick and of Lyttelton, and it was to this society that Mrs Montague introduced her new Scottish friends. It is true that there were days when 'Mrs Montague kept aloof from Johnson like the west from the east,' and when the sage said bitter things about 'Mrs Montague for a penny'; but there were also the other days when they smiled upon one another, when Johnson forgot that she had called *Rasselas* a narcotic, and listened while Mrs Thrale compared her conversation with that of Burke. Reynolds thought her beauty classical. Miss Burney once called her the glory of her sex, and all the world reading her essay on Shakespeare believed that she had saved his fame from the calumnies of Voltaire. Into this admiring circle Gregory was admitted and was himself enjoyed and appreciated, and it is possible that he might also in the end have secured a practice if he had continued to live in the south. But in 1756 his brother James died leaving a vacancy in the Chair of Medicine in Aberdeen. To this chair Gregory was appointed and half reluctantly he turned his back upon London, and took up his new duties at King's College. He returned unchanged except for his broader ideas and wider culture; and, although the rest of his life was passed within the somewhat narrow limits of university towns, he never became provincial.

Teaching was not one of his duties as mediciner. A few years apprenticeship to any doctor sufficed for training, and gave the students all the preparation they desired for a degree. John Gregory and Dr Skene fretted against

this, and in the hope of founding a Medical School opened Lectures on Medicine. But the students did not attend. It was an indignity to the university, keenly felt by these professors, that an Aberdeen degree should be the laughing stock of all the other universities ; but without an Infirmary it was impossible to teach the Practice of Physic, and the attempt had to be given up for the time.

Then it was that Thomas Reid and Gregory planned the Philosophical Society, which was nicknamed by the people who did not belong to it 'the Wise Club.' It met after five o'clock dinner at a queer little tavern called the Red Lion Inn. A paper was read and its subject discussed. There was wine on a side table, but no healths were allowed to be drunk, and at an early hour the discussions ended. Among the members were Gregory, Reid, David Skene, Gerard, and Beattie the poet, who became a great friend of Gregory's. The evenings were merry and the little parlour of the inn echoed to many a peal of laughter. The commonest entry about Gregory is 'discourse not readie,' which his cousin the philosopher, who kept the minutes never failed to insert, and also for the benefit of the Society the fine was always claimed by the members present, and laughingly paid by the unready professor. On these nights when no essay was read the Society had to content itself with philosophic discussion, the nature of which was arranged at the previous meeting. There was for them always, however, one never failing subject in David Hume's Sceptical Speculation 'Your company, although we are all good Christians, would be more acceptable than that of Athanasius,' wrote Reid in 1763 to his great opponent, and it was true. To Gregory there were moreover fields for speculation on

education, on what medicine had done for men, on the distinction between Wit and Humour, on agriculture, and in his two books which attained such popularity there are chapters which do nothing more than follow out the ideas which he uttered at the Philosophical Society. Many books had their origin in this club. Gerard's on *Taste*, Beattie's *Essay on Truth*, Campbell's *Treatise on Miracles*, and *Philosophy of Rhetoric*, and John Gregory's *Comparative View of Man and the Animal World*, all books with a great name in their day, but Gregory's for one sadly uninteresting now, when his startling views upon education have been universally accepted, and there remains of what is unusual only pedantic comparison and prosy sentiment. It is forgotten that John Gregory was an innovator when he advocated keeping children warm and when he refused to recognise the necessity of the icy morning bath, which before his day was *de rigueur* in every nursery. Long after his teaching days were over there were still found homes where his broad sensible views had not penetrated, and in the *Memoirs of a Highland Lady* Miss Grant gives a terrible description of her own early days (1806).

'A large long tub stood in the kitchen-court, the ice on the top of which had often to be broken before our horrid plunge into it; we were brought down from the very top of the house, four pair of stairs, with only a cotton cloak over our night gowns, just to chill us completely before the dreadful shock. How I screamed, begged, prayed, entreated to be saved, half the tender-hearted maids in tears beside me, all no use, Millar had her orders. Nearly senseless, I have been taken to the housekeeper's room, which was always warm, to be dried, then

we dressed, without any flannel, and in cotton frocks with short sleeves and low necks. Revived by the fire, we were enabled to endure the next bit of martyrdom, an hour upon the low sofa, so many yards from the nursery hearth, our books in our hands, while our cold breakfast was preparing.' What a changed life have the little folks of to-day! But, ah me! this name of Gregory to childhood. 'The evil that men do lives after them; the good is oft interred with their bones . . .' the son's mixture made the name of Gregory abhorred in every nursery, and all the father's good deeds are forgotten.

On the 29th of September 1763 Dr Gregory's wife died. It was the greatest sorrow of his life, and afterwards when high honours came to him in his profession, and when the world praised him, he never ceased to think with longing of the early joyous days of his love. Elizabeth Gregory was very happy, and even in her memory there is something tender and simple, something to make one smile, and feel the better of it. Picture this peer's daughter, as she stood one afternoon, making impotent appeals to her little boy (who was dressed in white for a party,) to leave the herd of small ragamuffins whom he was leading to a glorious mud-damming of the gutter. Little James paid no attention to his mother—I doubt whether he heard her—for the dam was breaking, hope was almost gone, when with a shout of joy he remembered that he himself was a solid body, and sitting down in the breach, cried out in broad Scots to his admiring followers, 'Mair dubs, laddies, mair dubs.'

Some years after his wife's death Dr Gregory was invited to go to Edinburgh. Professor Rutherford, who held the chair of the Practice of Physic, wished to retire, but he

would not resign his place to Cullen, whom he held a heretic in medicine. So the old professor arranged that John Gregory should be asked to come from Aberdeen, and set up practice in Edinburgh. At another time Professor Gregory would have hesitated, but in his distress and despondency he thought of what a benefit it would be to himself to leave the sad associations of Aberdeen and allay his sorrows in the fulness of work which he knew would await him. His university did not ask him to resign his chair at King's College, but in 1765 Sir Alexander Gordon of Lesmore was appointed as joint-professor.

John Gregory settled in 15 St John's Street, Edinburgh, in 1764. His house was pleasantly situated on a hill, and was almost next door to Lord Monboddo's, between whom and Gregory there presently sprang up a great intimacy. Practice came fast to Gregory, but celebrity greater than that which comes to a practitioner, however successful, made his first year in Edinburgh a year of triumph. Only a few months before, he had sent his manuscript of *A Comparative View of the State and Faculties of Man with those of the Animal World* to Lord Lyttelton, and now the book had been published in London and received with such an enthusiasm that even Gregory and his patron were greatly astonished. London read the book, Aberdeen read the book, and so did Edinburgh, and Gregory was made at once a member of that literary Edinburgh as he had in his youth been received by Mrs Montague and her friends in London.

The matter was good and fresh at the time, but what was most praised was the style. 'If you wish to see the natural style in the highest perfection, read the works of the late Dr John Gregory . . . But in particular his

Comparative View, which in respect to natural ease and unaffected elegant simplicity of style is not to be exceeded in any language, and in as far as my reading has extended has not been equalled by any other composition in English . . . Gregory's style may be compared to the acting of Garrick; it is only by a retrospective view that its superior excellence can be discovered.'

This is only one of the many laudatory reviews of the book, and by no means the most flattering, and it says a great deal for John Gregory's sense that, in spite of this lionising, he came so successfully through the difficulties which crowded round him for the next few years.

Professor Rutherford watched with growing satisfaction the success of the Aberdeen doctor, whom he regarded as a protegé of his own. It was unfortunate for Gregory that he stood as it were as a rival of Cullen, for whom he had throughout life the profoundest regard. But nevertheless this was the case.

In 1766 matters came to a climax in the appointment of Gregory to the Chair of the Practice of Physic, made vacant by the retirement of Professor Rutherford. There was an immediate and furious outcry against this election, which was known to be mostly due to family influence. Gregory was a great man, and proved himself a brilliant teacher, but at this time he was absolutely untried, whereas Cullen had already made himself a name as one of the greatest teachers of the day.

The gift of the chair was in the hands of the Town Council, and to that body an address from the students of medicine was sent after the death of Dr Whytt, Professor of the Theory of Medicine, suggesting the advisability of asking Professor Gregory to resign the Chair of the Practice

of Physic, which he then held, and accept the less important one of the Theory of Medicine, in order to make room for Cullen in the Practical Chair.

'We who make this application are students of medicine in your University. . . . We are humbly of opinion that the reputation of the University and Magistrates, the good of the city, and our improvement will all in an eminent manner, be consulted by engaging Dr Gregory to relinquish the Professorship of the Practice for that of the Theory of Medicine, by appointing Dr Cullen, present Professor of Chemistry, to the practical chair, and by electing Dr Black Professor of Chemistry.' After a dissertation on the qualifications of Dr Cullen, they proceed. 'Nor is this our opinion of Dr Cullen meant in the least to detract from the merits of Dr Gregory. On the contrary, a principal motive to our expressing the sentiments we do on this occasion is the high opinion we entertain of that gentleman's capacity. By a late very elegant and ingenious performance, by everybody attributed to him, we imagine it is evident what advantages the University must reap from lectures on the Theory of Medicine, delivered by a thinker so just and original, and so universally acquainted with human nature. With pleasure too, we reflect, that his character is not less respectable as a man, than as a Philosopher. We therefore cannot suppose, that were the public emolument to be obtained even at the expense of his private interest, he would not rejoice to make the honourable sacrifice, far less that he would, in the least hesitate to favour a scheme for promoting the public utility, when his private advantage is consistent with it.'

This can hardly have been pleasant reading for Gregory,

and the whole proceeding was so entirely out of order that the Town Council took no action in the matter. Meanwhile Gregory was made First Physician to the King for Scotland in the place of Dr Whytt. He lectured for three years on the Practice of Physic, and then he and Cullen agreed to give alternate lectures on the Theory and Practice of Medicine. The university possessing three such able teachers as Gregory, Cullen and Black, grew more and more prosperous. It is impossible to go over the records of these years without admiration for John Gregory, who, amidst all the strife that waged around him and around Cullen, has not left a record of any bitterness. That he must have felt these annoyances is obvious, but his worries were only Edinburgh worries, and outside he knew that both he and Cullen were appreciated and valued for their individual work. On his appointment to the Edinburgh chair he had resigned his King's College professorship.

When Dr Gregory came to Edinburgh, he came with his six children. Elizabeth, his youngest little girl, died in 1771. His eldest son James was studying medicine, the other boys were at work, and Dorothea and Anna Margaretta, his elder daughters, were growing into more charming companions for him with every day that passed. They were tall, willowy girls, promising great beauty, and full of sweetness. Dorothea, or Dolly as she was called, was a god-daughter of Mrs Montague's, and when that lady came to stay with Dr Gregory, she was absolutely fascinated by her godchild. Her visit was a great pleasure to the Gregorys, to whom she was ever her most charming self.

Edinburgh society did not take kindly to her, if we are

to believe Dr Carlyle, and in fact he is rather bitter upon the subject, calls her 'a faded beauty,' 'a candidate for glory,' and says she might have been admired by the first order of minds had she not been 'greedy of more praise than she was entitled to.' Even he, however, acknowledged her a wit, a critic, an author of some fame, possessing some parts and knowledge, which is praise to a certain point, though not to the point which Mrs Montague would have desired! 'Old Edinburgh was not a climate for the success of impostures,' writes the minister of Inveresk, and then to support his judgment with a little legal weight, he added, 'Lord Kames, who was at first catched with her Parnassian coquetry, said at last that he thought she had as much learning as a well-educated college lad here of sixteen.' Alas, poor Mrs Montague! and then, too, Dr Carlyle has unwittingly pointed out the rock on which she struck—'she despised the women'—and by such obvious silliness did she not evoke her fate? Gray the poet was also a visitor at the Gregorys' and Gregory was asked to meet anyone of interest who came to the town. With Smollett, indeed, who lived in St John Street for a winter, he could have little real friendship, for the novelist had put Lord Lyttleton into *Roderick Random* in anything but a kindly spirit, and the Gregories were notoriously 'Love me, love my dog' people. He lived on terms of close intimacy with Dr Robertson, Dr Blair, David Hume, John Home, Lord Kames, Lord Monboddo, and Lord Woodhouselee. He was a member of the Poker Club, though he went there very seldom, because of the way he was laughed at when he uttered his favourite doctrine of the superiority of women over men. This at least was the gossip of the time, but there is just

a possibility that he thought his own company more entertaining than the constant attendance at the Poker from three in the afternoon till eight at night, and though no one knew it, he was busy drawing up a book of advices for his daughters against the time, which he felt could not be very far off, when he would no longer be with them.

'My Dear Girls—You had the misfortune to be deprived of your Mother at a time of life when you were insensible of your loss, and could receive little benefit either from her instruction or her example. Before this comes to your hands, you will likewise have lost your Father. I have had many melancholy reflections on the forlorn and helpless situation you must be in if it should please God to remove me from you before you arrive at that period of life, when you will be able to think and act for yourselves. . . . I have been supported under the gloom . . . by a reliance on the Goodness of that Providence which has hitherto preserved you, and given me the most pleasing prospect of the goodness of your dispositions, and by the secret hope that your Mother's virtues will entail a blessing on her children.'

This was the spirit in which the book was written, and though it is a type of book which has entirely passed out of fashion, it is interesting to read it and remember that in the days of our great-grandmothers it had its place on every girl's table.

Dr Gregory had a very observant way of watching girls, he knew life, and his advice was shrewd and tender. In the chapter on Conduct and Behaviour there are many quaint observations as to what gifts are attractive in a girl.

'Wit,' he says, 'is the most dangerous talent you can

possess, it must be guarded with great discretion and good nature, otherwise it will create you many enemies' . . . 'Be even cautious in displaying your good sense. It will be thought you assume a superiority over the rest of the company—But if you happen to have any learning, keep it a profound secret, especially from the men' . . . 'Beware of detraction, especially when your own sex are concerned. You are generally accused of being particularly addicted to this vice—I think unjustly—Men are fully as guilty of it when their interests interfere. As your interests more frequently clash, and as your feelings are quicker than ours, your temptations to it are more frequent. For this reason, be particularly tender of the reputation of your own sex, especially when they happen to rival you in our regards.' Later on, there is a pathetic feeling of how little he can foretell his daughters' tastes. 'I do not want to *make* you anything, I want to know what Nature has made you, and to perfect you on her plan.'

A Father's Legacy to his Daughter was intended only for his own girls, and was not published till after Dr Gregory's death. During his time in Edinburgh he brought out besides his *Comparative View*, *Lectures on the Duties and Qualifications of a Physician*, which were his introductory lectures, and *Elements of the Practice of Physic*, a first volume of a text-book for his students which he did not live to complete. He thought medicine required a more comprehensive mind than any other profession, and often brought much besides mere technical knowledge into his lectures. As a speaker he was simple, natural and vigorous. He lectured only from notes, 'in a style happily attempered,' said one of his contemporaries, 'between the formality of studied composition, and the

ease of conversation.' On one thing he insisted, that every student should appreciate the limitations of medicine, for only so could they learn to extend its borders.

During these years, too, he carried on a constant correspondence with James Beattie, Professor of Moral Philosophy in Aberdeen, and a poet. Both Beattie and Thomas Reid, who held the corresponding chair in Glasgow, were engaged in combating the teaching of David Hume, which had become very fashionable, and Gregory, though much attached to David Hume as a man, feared him as a teacher, and dreaded the growth of that scepticism which marked the time—a tendency quite as bitterly lamented in England by Samuel Johnson.

'I am well convinced,' Gregory wrote to Beattie in a letter dated Edinburgh, 16th June 1767, 'that the great deference paid to our modern heathens has been productive of the worst effects. Young people are impressed with an idea of their being men of superior abilities, whose genius has raised them above the vulgar prejudices, and who have spirit enough to avow openly their contempt of them. Atheism and Materialism are the present fashion. If one speak with warmth of an infinitely wise and good Being, who sustains and directs the frame of nature, or expresses his steady belief of a future state of existence, he gets hints of his having either a very weak understanding, or of his being a very great hypocrite . . . You are the best man I know to chastise these people as they deserve, you have more Philosophy and more wit than will be necessary for the purpose, though you can never employ any of them in so good a cause.'

When Beattie's answer to Hume was in manuscript, he

sent it to Dr Gregory, who read it, and cordially approved of it, but one result of this was that Gregory had to become a partaker in the acrimony of Hume's friends. His advices as to an attractive style were somewhat curious, 'You are well aware of the antipathy, which the present race of readers have against all abstract reasoning, except what is employed in defence of the fashionable principles; but though they pretend to admire their metaphysical champions, yet they never read them, nor if they did, could they understand them. Among Mr Hume's numerous disciples, I do not know one who ever read his *Treatise on Human Nature.* In order, therefore, to be read, you must not be satisfied with reasoning with justness and perspicuity; you must write with pathos, with elegance, with spirit, and endeavour to warm the imagination and touch the heart of those who are deaf to the voice of reason. Whatever you write in the way of criticism will be read, and, if my partiality to you does not deceive me, be admired. Everything relating to the 'Belles Lettres' is read, or pretended to be read. What has made Lord Kames' *Elements of Criticism* so popular in England, is his numerous illustrations and quotations from Shakespeare . . . This is a good political hint to you in your capacity of an author.'

Gregory was also consulted about the sketch design of Beattie's Poem, *The Minstrel*, which he admired, and the closing stanza written by his friend the poet, when he heard of Gregory's death, was supposed to be very beautiful poetry. Cowper wrote in one of his letters to the Rev. William Unwin, 'If you have not his poem called *The Minstrel*, and cannot borrow it, I must beg you to buy it for me, for though I cannot afford to deal largely

in so expensive a commodity as books, I must afford to purchase at least the poetical works of Beattie.'

Gregory's views of his friend's high gifts then were shared by Cowper. Gray also held him in high estimation, and Mrs Siddons spent an afternoon with Beattie, crying because they were so happy over poetry and music, and some of the poetry must have been his own. As for Beattie's lines on Gregory, they are as much calculated to draw smiles as tears from our eyes.

'Adieu, ye lays that fancy's flowers adorn,
The soft amusement of the vacant mind!
He sleeps in dust and all the Muses mourn,
He whom each virtue fired, each grace refined,
Friend, teacher, pattern, darling of mankind!
He sleeps in dust: and how should I pursue
My theme? To heart-consuming grief resigned,
Here on his recent grave I fix my view,
And pour my bitter tears. Ye flowery lays, adieu!

Art thou, my Gregory, for ever fled?
And am I left to unavailing woe?
When fortune's storms assail this weary head,
Where cares long since have shed untimely snow,
Ah, now, for comfort whither shall I go?
No more thy soothing voice my anguish cheers,
Thy placid eyes with smiles no longer glow,
My hopes to cherish and allay my fears.
'Tis meet that I should mourn, flow forth afresh my tears.'

Gregory wrote little upon religious subjects, except some chapters in the *Comparative View* and in the *Father's Legacy*, but he spoke often of the things which pertain to the Life Eternal. To him they were as really present as the circumstances of every day.

His mind was deeply religious, but it was of that sort that lives more by meditation than church-going. Though

he was a Presbyterian himself, he had his younger children brought up as Episcopalians, wishing them in everything to be likened as much as possible to their mother.

One day in the beginning of February 1773, John Gregory was talking to his son James about his health. His son told him that he feared it was likely he would soon have a bad attack of gout, a disease from which he had been entirely free for three years. Professor Gregory, who felt himself in full vigour, and who was in the height of his work, was much vexed with this prognosis. Gout was a dread enemy in his mother's family, and he always feared its visitations. He had suffered from it more or less since he was eighteen, and the preface to the *Father's Legacy* indicates his anticipation of an early death.

On the morning of the 10th he was found dead in bed. His face was peaceful, everything was smooth and still, showing that death had come gently. But the familiar presence had passed away for ever from his home. It is said that Gregory had a great fear of darkness, and that after his wife's death he used to have an old woman come and sit by him to hold his hand till he fell asleep, and if this is true, it is most strange. He was forty-nine when he died.

John Gregory was succeeded in the chair by William Cullen, who, when his time came, made room for James Gregory, the fourth incumbent of the chair: a son of Dorothea Gregory, William Pulteney Alison was the sixth.

In appearance John Gregory was tall and strongly built. His face in repose was kind, although too full and heavy to look clever; even his eyes were dull.

When he was talking there was a complete change. Interest, life and expression transformed his features, until one could hardly suppose him to be the same man. The charm of his manner has never been gainsaid, aud like the beauty of his wife, it is mentioned in every biography.

After her father died, Dorothea went to live with her godmother, Mrs Montague, under whose care she spent the rest of her unmarried life. She was made very happy, and gave great pleasure wherever she went. She had inherited, if not all her mother's beauty, a great share of it, and her nature was as sweet and strong as her father's and mother's in one. When Sir William Pulteney, who had been a friend of her father's, heard of Dorothea's engagement to the Rev. Archibald Alison, he wanted to satisfy himself that she was making a suitable marriage, and with this object in view went himself to see if all the good things that were said about the bridegroom were true. He gives a pleasant description of the expedition.

'Andrew Stuart and I accompanied Mr Alison to Thrapston, and the marriage took place on the 19th, by a license from the Archbishop of Canterbury. I conducted them afterwards to their residence, and we left them next morning after breakfast, as happy as it is possible for people to be. Mr Alison was obliged to come round by London, in order to take an oath at granting the license, and I was glad of the opportunity which the journey afforded me of making an acquaintance with him; for tho' I had little doubt that Miss Gregory had made a proper choice, yet I wished to be perfectly satisfied, and the result is, that I think neither you nor Mr Nairne have said a word too much in his favour.'

Dorothea Gregory's two sons were William Pulteney Alison, Professor of the Practice of Physic, and Sir Archibald Alison, the historian. Her daughter Montague, before her marriage with Colonel Gerard, was loved by Thomas Campbell, the poet, and by Francis Jeffrey.

Anna, John Gregory's second daughter, married John Forbes, Esq. of Blackford, in Aberdeenshire. William the second son went into the Church, and was appointed one of the 'six preachers' in Canterbury Cathedral. Of his sons one was a successful doctor in London, and another, John, Governor of the Bahammas, was the father of Mr Philip Spencer Gregory, who has already been referred to in this book.

Dr Gregory changed the spelling of his name from Gregorie to Gregory during his stay in London. Curiously enough, the only other branch of the Gregories who had up to that time emigrated to the south had made the same alteration.

Professor John Gregory's fame, while it may not have extended as widely as that of his son, was yet far-reaching. When Beattie had an interview with the king in 1773, His Majesty made special enquiries about his First Physician for Scotland. This was probably shortly after the professor's death.

His life published in 1800 along with sketches of Lord Kames, David Hume, and Adam Smith, ends with these words—

'Upon the whole, whether he is considered as a man of genius and of the world, or with regard to his conduct in the line of his profession, few human characters will be found to equal that of the late Dr John Gregory.'

CHAPTER IX

JAMES GREGORY, 1753-1821

'If in doubt, "lead with trumps," is counsel so old
As never to fail with the game in a fixture;
And medical men, in their doubt, I am told,
Are safe when they lead with—*Gregory's Mixture!*'

—OLD PLAY.

IT was in the middle of the session, 1772-73, that John Gregory died, leaving as we know his work in full swing. The university authorities were told, not of his illness, but of his death, and they were greatly at a loss as to who should continue the course of lectures which Professor Gregory had commenced with so much vigour. In this difficulty it was that James Gregory his son stepped forward; although he was only a medical student, he offered to deliver lectures on the Practice of Physic till the end of the term, and this proposal was most gratefully accepted by the university.

There is something which is perhaps not wholly unattractive in the idea of being the professor as well as the student; but at nineteen to lecture, and to lecture so well as to receive in consequence the offer of a chair at twenty-three, is a triumph which is rare indeed.

James Gregory was born in Aberdeen in 1753, and even as a child his mind always seems to have been keenly awake. He left the Grammar School of Aberdeen when he was eleven, having learned all that was to be

learned there, and entered King's College at an age at which clever boys now leave a preparatory school.

In the same year when his father removed to Edinburgh James Gregory entered that university, and there he spent the next years of his life. Later he went up to Christ Church, Oxford, of which his cousin was then dean. Oxford did not inspire him much, for indeed learning was then at a very low level there, but he continued his work at classics, and came to write Latin with fluency, Greek when there was occasion, and both 'with classical elegance,' if we are to believe his admiring contemporaries.

It is probable that it was at Oxford that James Gregory resolved to follow in his father's footsteps, and become a doctor. There were of course many inducements, and all the influence of his family would be brought to bear on that side; but beyond this may we not believe that visions were given him of the golden fame that a hitherto unimagined mixture would bring to the name of Gregory unto all time? Whether the vision was vouchsafed to him or not, he returned to Scotland and began his medical studies in 1767.

It was a brilliant time in Edinburgh University. The medical professoriate contained a number of remarkable men. Cullen was there who had revolutionised medicine, Alexander Monro 'Secundus,' the greatest of a great family, Black who was acknowledged by Lavoisier as the pioneer of modern chemistry, John Hope the botanist and John Gregory. Under such teachers as these James made rapid progress, and although there are no tales of medals or prizes we cannot forget the instance of his medical foresight when he predicted an attack of gout for his

father, which attack came, to his sorrow, so soon and so fatally after the prediction.

The Chair of the Practice of Physic was given to Cullen, and young Gregory went to St George's Hospital, London, to gain a wider experience. He took his M.D. degree in Edinburgh in 1774: his thesis entitled *De morbis Coeli Mutatione Medendis* treats in detail Phthisis Pulmonalis, Hypochondriasis, and Gout, and concludes by noticing the advantage of change of air in the prolonging of human life. Startlingly wide in subject as this thesis appears to us, it was greatly admired for its style and minuteness, and thus Gregory, quitting Edinburgh for a time of study on the continent, left behind him a very favourable impression both of his talent and hard-working research.

Leyden, Paris, and Italy formed matter for enchanting letters which were the delight of his friends. Where are those letters gone to? How pleasant would it be to live through them a student's life in these years. Whatever James Gregory could be, he was never dull, and besides in them we might have found the early tokens of that fierce temper which is the only pity of his professional career in Edinburgh.

There are two portraits of Gregory, or rather a portrait[1] and a bust, which were said to be very like. A tall man, large, ungainly, of a rare presence. A man having authority impressed on every feature, radiant with affection for his friends, intolerant of enemies, asking his own way and getting his own way, loving, hating, thinking, speaking, feeling, always with intensest ardour. Here was a man

[1] The portrait is by Raeburn, and there is also a miniature of the professor by the same artist, which is in the possession of Mr Philip Spencer Gregory.

whom none of his associates could regard dispassionately; they either loved him as a friend or hated him as an enemy.

Even in Edinburgh which was full of personalities, real individuals, men who were above all things themselves, Gregory stands out a great original. Lord Cockburn and Sir Robert Christison were not inclined to agree with each other on most subjects, yet about Gregory's power there is a refreshing unanimity in their opinions.

In June 1773 he was elected to the Chair of the Institutes of Medicine. This chair had been practically vacant for three years, during which time it was offered over and over again to Alexander Monro Drummond, whose chief merit seems to have been that he united the names of the great teaching Monroes with that of Drummond, perhaps the noblest citizen Edinburgh has ever had. It has been suggested, however, that this was only done to keep the appointment open for Gregory, when he should have completed his studies, and certainly when he returned, his election was unanimous. He entered upon his duties with happy vigour. Teaching was, as with every Gregory, his greatest gift, and the classes grew steadily all the time he was professor. The university never made greater progress than it did about this time, the medical graduates rising in number from about twenty in 1776 to one hundred and sixty in 1827.

In the teaching of his class Professor Gregory daily felt the need for his students of a new book on the Theory of Medicine, so he wrote the *Conspectus Medicinae Theoreticae* which proved such a valuable handbook on the subject. This book was most successful, it passed through many editions, was translated into English and several other

languages, was used sometimes as a medical book and sometimes as a Latin text, for the Latin was as much admired as the information which it imparted. Considering the success of this volume, it is surprising that this was James Gregory's only medical publication: he alas wrote many books afterwards, but with the exception of some chapters on philology and some literary essays, he wrote nothing but controversial works, prodigiously long, violent, personal, and acrid; their only excuse that they were never written for selfish ends and their only merit that they were a source of infinite amusement to the general public.

Gregory lived in his father's old house, No. 15 Canongate, and to this home he brought his first wife, the gentle Galloway girl, called Mary Ross, whose companionship was his, for such a short time in life's journey. She died in 1784. In the years following her death he resumed his early classical studies, and it is a rather curious fact that he wrote nearly all the Latin epitaphs or dedications which were wanted for any purpose in Edinburgh from this time till his death. Principal Shairp, referring to Burns' meeting with Gregory at Ochtertyre, describes how the poet 'was charmed with the conversation of that last of the Scottish line of Latinists, which began with Buchanan and ended with Gregory.'

In 1787, he published his essay on the *Theory of Moods and Verbs*, and in 1792, *Philosophical* and *Literary Essays*. He was a great student of words, loved epigram, and spent much of his leisure in translating poetry. He was also interested in metaphysics, but as his great maxim was that in metaphysics there could be no discovery, his writings on this subject do not appear to have added

much to his fame. Throughout these years, too, he kept up a constant correspondence with his cousin Thomas Reid, and proved himself just the appreciative critic that Reid required in the writing of his books. Dugald Stewart and Gregory together revised the proofs of Reid's *Essays on the Intellectual Powers*, and to them this book was dedicated.

'I send you,' writes Reid, 'what I propose as the title of my Essays, with an epistle which I hope you and Mr Stewart will allow me to prefix to them. Whether your name should go first on account of your doctor's degree, or Mr Stewart's, I leave you to adjust between yourselves. I know not how to express my obligations to you both for the aid you have given me.'

Towards the end of 1790 it became apparent that Cullen, the greatest doctor of his time was failing in strength, and on his resigning the Chair of the Practice of Physic the Town Council reappointed him in kindly recognition of his great services to the university, but appointed James Gregory to be joint-professor during his lifetime with the sole right of survivorship. This comradeship did not last long, for in the same year Cullen died. To no less strong man could the task of succeeding this veteran teacher, who had raised the reputation of the Edinburgh School to such a height, have been wisely entrusted.

As Professor of the Theory of Physic, Gregory had shown remarkable gifts, but in his new subject his teaching was superb. Sir Robert Christison in his autobiography, says of him, 'Equal in fluency as in choice of language, he surpassed all lecturers I have ever heard. His doctrines were set forth with great clearness and

simplicity in the form of a commentary on Cullen's *First Lines of the Practice of Physic*. His measures for the cure of disease were sharp and incisive. In acute diseases there was no 'médecine expectante' for Gregory, he somehow left us with the impression that we were to be masters over nature in all such diseases, that they must of necessity give way before the physician who is early enough and bold enough in encountering them.' He had a memory so clear that he was never known to forget a case, and in his lectures he made his students see not only the general features of a disease, but an actual case of it which had come under his care. He used stories and history, and his own experience to vivify his lectures, and no doubt he succeeded for he had seen many sides of life. He never had time for more than two-thirds of his subject in one course, but whatever he missed out he always discussed fevers and inflammations. In much that he taught he was in advance of his age. In observing how frequently rheumatic fever tends to heart disease; in limiting the use of blood-letting [1] at a time when it was becoming almost a universal panacea with doctors, in urging a liberal dietary in certain stages of consumption, and in the invention and use of his mixture he showed that his views were in advance of those held by most of his brother physicians. Professor Gregory had an odd habit of wearing his cocked hat while he lectured.

It was in the summer of 1796 that dear old Thomas Reid, who was becoming very frail, was induced to pay a visit to St Andrew's Square, to which Gregory had migrated. His daughter, Mrs Carmichael, was anxious to have the

[1] In whole classes of cases, however, Gregory was a decided advocate of blood-letting.

opinion of Dr Gregory, as to whether there was anything she could do to retard the bodily decay which increased daily in her father. It was a happy time to them all. Gregory delighted in the keenness of the old man's mind. As he was not fit for much exercise, he passed his time in solving algebraical problems, and discussing abstruse subjects with Dugald Stewart. Gregory was no doubt busy. His practice increased daily, and besides this, he probably spent a good deal of his time in the house of Mr M'Leod of Geanies, the Sheriff of Ross-shire; to whose daughter, Isabella, he was married on the 19th of October, just ten days after Thomas Reid's death.

Miss M'Leod was a very beautiful girl, both winning and attractive, if Raeburn's portrait of her is true to life, and she made both a good wife and good mother. Among Raeburn's other portraits, and interesting to us because they were the friends of the Gregories, are such men as Dugald Stewart, Principal Robertson, Blair, Home, Ferguson, Mackenzie, Francis Horner, and Jeffrey. How much is it Raeburn, one wonders, who makes these men and women so charming, for it is their looks and what we know of their lives, far more than their writings, that attract us. Principal Robertson, with all his sweetness and dignity, has only written histories which are now superseded. Jeffrey railed at Wordsworth. Blair's sermons are but a lingering tradition. The eloquence of Dugald Stewart, which brought Melbourne, Lord John Russell, and Palmerston to Edinburgh University, is now forgotten. It is not by their books that we know these men, it is because we love them when we see their portraits; it is because Cockburn lets us know them in their homes—it is because John Brown, who lived early enough to

be in touch with those who remembered them, has written about them lovingly and tenderly. They were delightful men, but more delightful in their lives than in their books. The witty criticisms of the *Edinburgh Review* have passed away; they were for their day—but the remembrance of Jeffrey's pleasant after-intercourse with Wordsworth, the kindliness with which Gregory welcomed all the young Edinburgh reviewers into his house at a time when no other Tories except the 'man of feeling' and Archibald Alison would receive them, and the occasional permission which Principal Robertson gave little Henry Cockburn to feast off his cherry tree—these are memories which will appeal to the kindly hearts of all time.

Then it is amusing to read Dr Gregory's critical letter to Burns, who must have required all his admiration for the great doctor to bear patiently the numerous suggestions which he showered upon him.

'EDINBURGH, *2nd June* 1789.

'DEAR SIR,—I take the first leisure hour I could command, to thank you for your letter and the copy of verses enclosed in it. As there is real poetic merit, I mean both fancy and tenderness, and some happy expressions, in them, I think they well deserve that you should revise them carefully and polish them to the utmost. This I am sure you can do if you please, for you have great command both of expression and of rhymes; and you may judge, from the two last pieces of Mrs Hunter's poetry that I gave you, how much correctness and high polish enhance the value of such compositions. As you desire it, I shall with great freedom give you my *most rigorous* criticisms on your verses. I wish you would give me another edi-

tion of them, much amended, and I will send it to Mrs Hunter, who, I am sure, will have much pleasure in reading it. Pray give me likewise for myself, and her too, a copy (as much amended as you please) of the "Waterfowl on Loch Turit."

'The "Wounded Hare" is a pretty good subject, but the measure or stanza you have chosen for it is not a good one: it does not *flow* well; and the rhyme of the fourth line is almost lost by its distance from the first, and the two interposed, close rhymes. If I were you I would put it into a different stanza yet.

'Stanza 1.—The execrations in the first two lines are too strong or coarse, but they may pass. "Murder-aiming" is a bad compound epithet and not very intelligible. "Blood-stained" in Stanza III. line 4 has the same fault: *Bleeding* bosom is infinitely better. You have accustomed yourself to such epithets and have no notion how stiff and quaint they appear to others and how incongruous with poetic fancy and tender sentiments. Suppose Pope had written "Why that bloodstained bosom gored" how would you have liked it? *Form* is neither a poetic nor a dignified nor a plain common word: it is a mere sportsman's word: unsuitable to pathetic or serious poetry.

'"Mangled" is a coarse word. "Innocent," in this sense, is a nursery word; but both may pass.

'Stanza 4. "Who will now provide that life a mother only can bestow" will not do at all: it is not grammar—it is not intelligible. Do you mean "provide for that life which the mother had bestowed and used to provide for?" There was a ridiculous slip of the pen, "Feeling" (I suppose) for "Fellow," in the title of your copy of the verses; but even "fellow" would be wrong: it is but a colloquial

and vulgar word, unsuitable to your sentiments. "Shot" is improper too. On seeing a *person* (or a sportsman) wound a hare: it is needless to add with what weapon; but if you think otherwise, you should say with a *fowling-piece*. Let me see you when you come to town, and I will shew you some more of Mrs Hunter's poems.'

Perhaps when Burns submitted his lines, 'On seeing a wounded hare limp by me, which a fellow had just shot at,' he hoped for as kindly a criticism as Dr Gregory had given to Clarinda's verses, which the poet had shown him in December 1787; but if so, he was much disappointed. 'Dr Gregory is a good man, but he crucifies me,' wrote Burns soon after; and again, 'I believe in the iron justice of Dr Gregory; but like the devils I believe and tremble.' It was a curious friendship, but friendship it was. There is an English translation of Cicero, which the physician had given to Burns in Edinburgh in 1787, and on the fly-leaf of this is written, 'This book, a present from the truly worthy and learned Dr Gregory, I shall preserve to my latest hour as a mark of the gratitude, esteem and veneration I bear the owner—so help me God.—Robert Burns.' Clarinda's desire to make Gregory's acquaintance which is surely an indication of how much her Sylvander admired him, finds utterance in a letter of 1787, 'Pray is Dr Gregory pious? I have heard so, I wish I knew him.'

It was at Lord Monboddo's that Gregory first met Burns. Besides the queer old judge, who was made a laughing stock for saying that men originally had tails, there was his charming daughter, the beautiful Miss Burnet, to whom Gregory is said to have offered his heart and hand.

One of the stories that Lord Cockburn tells of Gregory is in connection with Miss Sophia Johnston (generally

known in the Edinburgh of that day as 'Suphy') one of the Hilton family; about whom, because of her curious upbringing, there were many odd stories. 'When Suphy's day was visibly approaching, Dr Gregory prescribed abstinence from animal food, and recommended "spoon-meat" unless she wished to die. "Dee, doctor, odd, I'm thinking they've forgotten an auld wife like me up yonder!" However, when he came back next day, the doctor found her at the spoon-meat, supping a haggis—she was remembered.'

Gregory lived now, as we know, in St Andrew Square, having left the old home in the Canongate, but besides this he bought a house called Canaan Lodge, which was then at a sufficient distance from Edinburgh to be in the real country. Walking towards this house he might often be seen of an evening with his all too warlike stick over his shoulder, possibly the very stick with which he smote his brother physician Professor Hamilton within the sacred precincts of the university. The story does not end here, nor even at the Law Courts, where he was made to pay £100 damages to the infuriated object of his attack, but with Gregory, who as usual had the last word, and the last laugh in the matter, and said as he paid his fine, that he would willingly pay double for another chance.

'A' the country, far and near,
Hae heard Macgregor's fame, lady.

He was a hedge about his friends,
A heckle to his foes, lady;
If any man did him gainsay,
He felt his deadly blows, lady.

It is really a pity, but no sketch of Professor James Gregory could be adequate without mentioning some of

the more important of his professional feuds. Take the Infirmary for example, with which he was connected from so early a date as 1777, and where he made one of the most sweeping and necessary reforms that have ever taken place in the management of that institution. He early saw that it was neither for the good of the patients, nor for the good of the students, that the physicians and surgeons should attend the wards for only a month at a time, and against this he set himself with all the zeal of which he was capable. He disapproved the time-honoured privilege enjoyed by every member of the Royal College of Physicians, and every member of the Royal College of Surgeons, to doctor the Infirmary patients; and getting more and more enraged with the infatuation of his medical brethren, he presented a memorial to the managers of the Infirmary, expounding his views, that Infirmary appointments should be made either for life, or at least for a number of years, but unfortunately doing so in language, of which the following paragraph is but one specimen:—

'Let us suppose that in consequence of this memorial, every individual member of the College of Surgeons shall to his own share, make forty times more noise than Orlando Furioso did at full moon when he was maddest, and shall continue in that unparalleled state of uproar for twenty years without ceasing. I can see no great harm in all that noise, and no harm at all to any but those who make it. Ninety-nine parts in the hundred of all that noise would of course be bestowed on me, whom it would not deprive of one hour's natural sleep, and to whom it would afford infinite amusement and gratification while I am awake,' etc.

Such bitter writing was not, however, solely on one side.

On another occasion, by the consent of the Royal College of Physicians, 'A narrative of the conduct of Dr James Gregory towards the Royal College of Physicians of Edinburgh' was published, which opens with this ominous paragraph, 'It is with great pain, that the Royal College of Physicians, not a numerous, but hitherto, they trust, a very respectable society, find themselves compelled to come before the public with a narrative of their internal dissensions. The intemperate and injurious conduct of one of their members however has now made this a matter of necessity. Like other collections of individuals, they have had their dissensions and disagreements, but till very lately they were always conducted with the temper and the language of gentlemen, and were begun and ended within the walls of the College. Dr James Gregory has introduced a new style and a new jurisdiction.'

There is not much to choose between in these samples of professional controversy, but on the whole Gregory was usually more right in his views, and more wrong in his expression, than the other side. In spite of these quarrels Gregory's practice increased steadily. In 1818 his professional income was £2723, and in the following year £100 more, while in the same years he derived from his professorship by way of fees, £1364 and £1200 respectively. These figures represented a much larger sum in 1818 than they would in 1900, and give a substantial proof of Gregory's popularity.

A story told of Professor Gregory is peculiarly touching. One day when he was giving out the tickets for his class, he had to go into another room to fetch something. When he came back he saw a student, who was waiting for his ticket, take some money off his table and put it

into his pocket. The Professor gave him his pass and said nothing, but just as the lad was leaving the room, he rose up and laying his hand on his shoulder said, 'I saw what you did, and I am so sorry. I know how great must have been your need before you would take money. Keep it, keep it,' he added, seeing that the student meant to give the stolen money back to him, 'but for God's sake, never do it again.'

Sir Walter Scott has remembered also how Professor Gregory on one occasion gave a very ready reply to a learned member of the Scottish Bar. He was giving evidence about a man, who in his opinion, was insane. On a cross-examination, the professor was obliged to admit that the person in question played an admirable game of whist. The eminent counsel thought he had made a point. 'And do you seriously say, Doctor,' he added, 'that a person having a superior capacity for a game so difficult, and which requires in a pre-eminent degree, memory, judgment, and combination, can be at the same time deranged in his understanding?' 'I am no card player,' replied the doctor, 'but I have read in history that cards were invented for the amusement of an insane king.' Needless to say, he won his case!

In 1818 Gregory had a serious carriage accident, in which his arm was broken, and from this shock he never really recovered, though we still see him in the midst of work. He was one of a deputation from the University of Edinburgh to congratulate George IV. on his accession to the throne, and while in London he received the honour of a private audience of the king. During that visit his thoughts went back often to his time of study in London, and to all the prosperity that had come to him since. He

had received almost every honour which his profession could bring him. He had been President of the College of Physicians. He was made king's physician to George III., and his commission had been most graciously renewed (during this visit) by George IV. Innumerable societies had bestowed their honorary membership upon him, and many towns had given him the privilege of their freedom, but he felt that his days were nearly over.

During the last year he had attacks of difficulty of breathing, which made it impossible for him to lecture after Christmas 1820. The end came in April. He died of hydro-thorax at the age of sixty-eight.

Of Gregory's eleven children only five survived him. Two of them were in their turn to become teachers. William, afterwards Professor of Chemistry in Aberdeen and Edinburgh, and Duncan Farquharson, the Cambridge mathematician.

There was not lacking one token of the love and esteem in which the great professor was held. The voices of his rivals were hushed. His friends mourned for him, and the town where he had been such a familiar figure arranged a public funeral for him. He lies buried in the family vault in the Canongate Churchyard.

'VIR PRISCAE VIRTUTIS, PER OMNES VITAE GRADUS ET IN OMNI VITAE OFFICIO PROBATISSIMAE.'

CHAPTER X

WILLIAM GREGORY, 1803-1858

'Were it of hoot, or cold, or moyste, or drye,
And where they engendered and of what humour,
He was a verray parfit praktisour.'

—CHAUCER, *Prologue* 420-422.

WILLIAM GREGORY was the last of this great academic family to hold a chair in a Scottish University.

He was the fourth son of Professor James Gregory, and having been brought up among the traditions of medicine, he turned to the study of it instinctively, though the necessity laid upon him was by no means the same as that which had made his forefathers physicians in spite of themselves. He had not gone far in his medical course when he decided to be a chemist rather than a doctor. The magic of Professor Hope's experiments made at least one convert and as he sat in the class-room observing the strange effects of chemicals, he made up his mind that if it were possible he would some day take the teacher's place. With rude implements he would spend hours at home repeating the processes which he had watched in the class, his mind all alive to the interest of his subject, and his poor body much neglected. These happy hours in his laboratory were dearly paid for by the delicacy, which began to show itself about this time. The noxious fumes of the chemicals acted as a slow poison,

and from this stage of his life he had to struggle with ill health, all his occupations being interrupted at times by unconquerable pain.

He graduated M.D. in 1828, and then went abroad to study chemistry in the famous schools of the continent. At Giessen, the most important of these, he had the good fortune to attract the attention of the great teacher, whose work had made the university famous, and from this time forward, Liebig was the friend and correspondent of William Gregory.

During the years when Gregory was completing his studies abroad, and teaching successively in Edinburgh, Glasgow, and Dublin, King's College, Aberdeen, was going through considerable difficulties in connection with the post of mediciner. In the days of John Gregory's tenure of that office, he had as we already know, made efforts to improve the medical curriculum there, but without success. A step in advance was made in 1801, when it was determined that a candidate for the degree of M.D. must 'oblidge himself that he is not, nor will be concerned in the sale of quack medicines of any description!' and a further step was taken in 1817 by the authorities insisting on a satisfactory account of the 'classical, literary and scientifical education of the candidate.'

Between 1824 and 1826, an attempt was made by the Chancellor and Senatus to insist that the mediciner should teach medicine, but Dr Bannerman, who then held that office, would only consent to consider the matter for a year, and after that time he let it rest. In 1836, he was advised that if he would neither teach nor appoint a substitute, a lecturer would be chosen,

and paid out of his salary. This threat, however, was never carried out, and he died in 1838, and it was to this post of mediciner, made vacant by his death, that William Gregory was appointed on February 19th, 1839.

Dr William Pulteney Alison, to whom the electors of King's College applied for suggestions as to a suitable candidate, had curiously enough never mentioned the name of his cousin, and it was only owing to the intervention of Thomas Clark who held the Chair of Chemistry in Marischal College that Gregory came to apply. After giving him minute instructions as to the form which his application must take, he added, 'Don't mention me no more than the Devil.' The name of this friend was therefore kept out of sight, and Gregory was in due course appointed to the vacant professorship. It was with great joy that his advent was announced to the professors of King's College. Their difficulties in improving the medical course, when the very mediciner would not teach a class, had been insuperable, but now they felt a man of influence was coming amongst them, who would be the means of promoting the interests of their university, and who who would give the benefit of a hereditary power of teaching to the students, whom they felt sure his great name would attract to their midst.

While in Aberdeen William Gregory became intensely interested in the welfare of King's College, and busied himself in trying to secure revenue from the government to found new chairs, but in this he was unsuccessful.

He taught Materia Medica in a house fitted up for a Medical School in Kingsland Place, and he had a good class, but from the witticisms of the students as to the effect of their professor's preparation of muriate of mor-

phia it is evident that William Gregory's physical weakness was growing upon him, and that it was only with the most strenuous effort that he could get to his class at ten o'clock.

As his power of walking failed him, the professor found much solace in music, and sweet snatches of melody were carried across his old-fashioned garden to the ears of passers-by. He played beautifully, and his wife, who was a niece of Colonel Scott of Gala, added greatly to the charms of their musical parties. It is said that they were the first to shock the people of Aberdeen by playing secular music on Sunday.

To the Aberdonians, however, he gave a more serious cause for complaint—William Gregory was of a singularly childlike and trustful disposition, and he was intensely interested in the occult science of Spiritualism ; the result was that he became the patron of a most undesirable throng of quasi-scientific humbugs, whose presence in their midst they resented with extreme frankness. There is a continual atmosphere of table-turning, mesmerism and magnetic flames in the tales extant about him, and though the narrators are tender about his memory, they have perforce to take up the attitude of counsel for the defence.

As a chemist, he undoubtedly came first in Scotland. He invented processes for the more perfect preparation of hydrochloric acid, muriate of morphia and oxyde of silver, besides making important observations on many other chemicals. He had an accurate command of practical chemistry, a power of condensation and clear expression, and a just perception of the value of discoveries, which made his writings unsurpassed for the use of students.

In 1844 Dr William Gregory realised the dream of his youth. After a sharp contest with Dr Lyon Playfair, he was appointed to succeed Professor Hope in his chair in the University of Edinburgh. 'The chair was given to him,' says Sir Alexander Grant, 'under a new title, for the Town Council now judiciously omitted "Medicine" from its province, and elected Dr Gregory to be Professor of Chemistry.'

His health was much impaired, so much so, that people even went the length of saying that he was physically unfit for his new position, and it is at any rate true that his finest teaching was given to his students in Aberdeen. He was an able teacher, if at times erratic and absent-minded. His class was always kept wide awake, for with what alarms would not the professor bring back the straying imaginations of his audience! 'Gentlemen,' he would say, while with his long awkward fingers he lifted up the tube of some chemical before them, 'If this were to fall, not one of you could reach the door alive;' and then, considering the matter over, he would place the tube carelessly upon the edge of a plate, while the students near the doorway filtered through it, and the others, hat in hand, awaited the longed-for close of the lecture, feeling a fresh tremor with every approach of Gregory's loose fingers to the fatal vial.

Good as his teaching was, the books which he wrote while in Edinburgh were his most valuable contribution to the Science of Chemistry. In the preface to the *Outlines of Chemistry*, which was published in 1845, he sketched the divisions which he intended to make in his subject for the fuller elucidation of the facts, and, had his health permitted him to carry out his plan, 'the instruction from his class would probably have been more complete than

from any other scientific chair in Europe.' At the request of Liebig, he translated several of his more important books into English, and in the preface to the *Familiar Letters on Chemistry*, Liebig writes, 'From his intimate familiarity with chemical science, and especially with the physiological subjects here treated, I am confident that the task could not have been entrusted to better hands than those of my friend Dr Gregory.' Their friendship lasted throughout life, and only a few days before Professor Gregory's death, he was propped up in his bed to write a pamphlet supporting some new theories of Liebig, which the German had just communicated to him.

Gregory's appearance was most noticeable. He was of great proportions, obese, slouching and loosely hung together. In later years his body was a great burden to him, but the mind kept the mastery.

He was, like his father, a keen student of language, and would wile away many of the weary hours of forced inaction by the study of foreign tongues. French and German were to him as familiar as English. With a microscope, too, he did beautiful work, and was in his day, the greatest authority on the Diatomaceae. The slides which he made of these microscopic water-plants with their sculptured valves, were another resource of his declining years. He presented valuable memoirs on this subject to the Royal Society of Edinburgh, of which he was a member.

Professor William Gregory died in Edinburgh in April 1858, and was honoured with a public funeral.

He was succeeded in the university by Dr Lyon Playfair (afterwards Lord Playfair) who had contested the chair unsuccessfully at the time of Gregory's appointment.

William Gregory was survived by an only son, who was called after his father's far-famed friend, James Liebig Gregory.

Duncan Farquharson Gregory was considerably younger than his brother the Professor of Chemistry, and was not at all like him in personal appearance. His face was a beautiful one, fine, pale, bearing on it already in this life some of the light and joyousness that often mark out for especial love those who are to pass quickly from this earth. His hair, which was thick and curling, fell more about his brow than is usual, and his eyes like dark lamps illuminated his features.

When he was hardly more than a baby, his father used fondly to predict distinction for him. 'He had pleasure in conversing with him as with an equal on subjects of History and Geography,' so Mr Ellis wrote, and this when the boy was not more than six, for his father died before he had left the nursery. He was a great inventor of games for himself, and made an orrery with his busy little hands, on which he would send the planets spinning round in their orbits.

Till he was nine years old he was taught entirely by his mother, who was quite as attractive to her children as she had ever been in society, and for whom Duncan had always a peculiar reverence and affection. He passed out of her hands into the care of a tutor, and then was sent to the Edinburgh Academy. From school he went abroad to Geneva, where his mother and sisters were spending a winter, and on his return he attended classes at the University of Edinburgh. In mathematics he made astonishing strides, under Professor Wallace, and those who saw the master and pupil together in Cambridge

in after days, said that the old man's pride in his pupil's success never diminished.

In 1833 Mr Gregory's name was entered at Trinity College, Cambridge, and shortly afterwards he went to reside there. He took with him a most unusual amount of knowledge on almost all scientific subjects, in fact many men said that it was the diffuseness of his learning that prevented him from taking the first place in the mathematical honours in that university; for when the tripos came he was only fifth wrangler.

A few months after his arrival in Cambridge he agreed to act as assistant to the Professor of Chemistry, and he was one of the founders of the Chemical Society, and occasionally gave very charming lectures in their rooms. His other pursuits were botany, natural philosophy, and astronomy, but his most serious study was of course mathematics.

After taking his degree of B.A. in 1837, he felt himself more at liberty to follow original speculation, and turned his attention to the general theory of the combination of symbols. His studies in this subject appeared from time to time in the *Cambridge Mathematical Journal*, of which Duncan Farquharson Gregory was editor, with only an interval of a few months, from its first appearance till shortly before his death.

Mr Gregory was in 1840 elected a Fellow of Trinity College, and he took his M.A. degree in the following year. In that year, too, he was appointed to fill the office of moderator in the Mathematical Tripos. This position, which is regarded as one of the most honourable of those to which the younger members of the university may aspire, was filled by him with great success.

His most considerable book (though possibly less well known than his lucid work on solid geometry), appeared about this time. It is entitled *Collection of Examples of the Processes of the Differential and Integral Calculus*, and was thoughtful and original. At first his plan had been to edit a second edition of a work with a similar title, which twenty-five years before had come from the pens of Herschel, Peacocke, and Babbage, but as he considered this, he discovered what immense strides had been made in the general aspect of mathematics. The mathematical theories of heat, light, electricity, and magnetism were all new, and they required a fresh treatment. Thus he undertook the book which brought him so much honour.

Gregory had an absolute passion for mathematics. 'All these things seem to me,' he said once, while turning over the pages of Fourier's great work on heat, 'to be a kind of mathematical paradise,' and the enjoyment comes out all through his book.

He contested unsuccessfully with Professor Kelland the Chair of Mathematics in the University of Edinburgh, and in 1841 was offered the corresponding chair in Toronto, which, however, he declined; and it was well that he did so, for in the following year he had the first attack of the illness which was to end fatally for him. In the spring he left Cambridge never to return again.

Up to the last he had taken part in his college work, and in spite of severe suffering had gone through the irksome labour of examinations. Months of all but constant pain followed, brightened only by short intervals of ease. Whenever these occurred he turned to his old studies for refreshment, and only a little while before his death he

began a paper on the analogy between differential equations and those in finite differences.

As the weeks passed, the watchful eyes of his sister could see the gradual failing of his strength, and at five o'clock on the morning of February 23rd, 1844, he passed away in his sleep. He died at Canaan Lodge.

His sister, Miss Georgina Gregory, made a collection of the poems written by her brothers. Some of Mr Duncan Gregory's verses would have made delightful children's poetry. One time when they had gone to the English lakes together for change of air, they, as is not an entirely unknown experience in that part of the world, had to spend most of their time in the inn, and as a last resource fell to writing doggerel.

'The fields are one extensive bog,
The roads are just as bad;
I wish I were a little frog,
Then rain would make me glad.

But I am of the human race,
Which ever since the flood
Prefers a firm, dry resting-place
To wading in the mud.

But yet at last a little gleam
Of sunshine did appear,
And did most treacherously seem
As if the sky would clear.

And trusting to its specious face
To walk Georgina tried,
But soon returned in piteous case
To have her garments dried.'

He was a delightful brother and a delightful friend. What he might have done as a mathematician had he but

lived it is impossible to tell. As it is, a writer who has discussed the hereditary qualities of the family, speaks of the mathematical genius, which had lain dormant since the time of James Gregorie as 'blazing forth' again in Duncan Farquharson Gregory, and if this writer passes over such talents as those of David Gregory, the Savilian Professor at Oxford, he must have held the Fellow of Trinity in great honour. Another authority on the family, said that if Duncan Gregory were alive, which he might quite well be as far as dates are concerned, he would probably have been the most famous pure mathematician of the day. And a still greater testimony is that of Lord Kelvin, given at the Bristol meeting of the British Association in 1898, where in a paper on 'Graphic Representations of the two Simplest Cases of a Single Wave,' he referred to Gregory's work on this subject. 'Gregory,' he said, 'died too soon,' and as he turned from the black-board on which he had been drawing some diagrams, he added, 'we cannot tell what we might have known if Gregory had lived.' His talent was appreciated when he lived, but the qualities to which his friends reverted with most tenderness were his unenvious appreciation of other men's work, his sweetness and joyfulness, and the patience with which he bore his last long illness.

CHAPTER XI

RETROSPECT

'Whatever he had in himself, he would fain have made out a hereditary claim for.'—LOCKHART, *Life of Scott*, ch. lxxxiv.

WHEN Pennant on his famous tour through Scotland, came to the dreary moorland below Craigroyston, he was filled with special interest by the scene. Here, he was told, was the cradle of the M'Gregors, a clan so devoid of kindness, that they had been hunted down like wild beasts, their name suppressed and their remnant dispersed like Jews over the country. 'And even now,' he added, 'their posterity are still said to be distinguished among the clans in which they have incorporated themselves, not only by the redness of their hair, but by their still retaining the mischievous disposition of their ancestors.' What then, would Pennant have said, could he have known that from one descendant of a MacGregor would arise a family, thirteen of whom would be mentioned in the Encyclopædias of 1900? After all it should be remembered that even Rob Roy's literary tastes have never been sufficiently appreciated, for his name is found in the original list of the subscribers to Keith's *History of the Affairs of Church and State in Scotland*, published in 1734!

The Gregories, then, were inclined to an academic life. Their portraits appear oddly and unexpectedly in the public buildings of this country, their names equally

unexpectedly in many books; but their teaching which was the greatest gift they had to offer to their fellowmen can of course no longer be adequately appreciated. The very greatness of a teacher, which leads him to speak directly to the body of men before him with the needs, the ignorance, the prejudices, and the fancies of their age, makes his teaching unintelligible to any time but his own, to a preceding age, if it were possible, darkness, to a succeeding, platitude.

Going back to the beginning, how many times should we wish to thank one or other of the Gregories for their hard hitting at the shams and insincerities of their day! The Rev. John Gregorie, the founder of the family, began by withstanding Cant in the body, and overlooking the upturned sand-glass which that divine had set for him, taught his own views even though they were not accepted by his self-complacent opponent as the 'orthodox doctrein.' He after all, uninteresting as he perhaps appeared to be, is still the forerunner of the family greatness, and that not only as their first father, but because he showed an example of independence in opinion to his own children and to theirs—when the time should come that their grandfather's history would be told them by the fire of a winter's night.

One of his sons, David of Kinairdy, possessed the first barometer in Scotland, an innovation for which he nearly paid with his life. Another, Professor James Gregorie (the first), because he too rapidly realised the greatness of Newton's philosophy, and taught it, came under the ban of his fellow-professors at St Andrews, and was glad when the opportunity presented itself to receive the approbation of a sister university, more ready for his teaching.

He, too, invented the first reflecting telescope, through which things are seen as they appear to one's eyes, and not upside down as had been the case with earlier telescopes. This also in its way was a parable of what the Gregories were to do in the world of science in making things as plain as possible, so that the wayfaring men though fools, might not err therein. David the son and David the grandson both did most of their work at Oxford, the first teaching mathematics, and endeavouring to bring Newton's *Principia* down to the level of ordinary mathematicians, while the second, who was Professor of Modern History and Modern Languages, having been much abroad, arranged to have the assistance of foreign teachers, whom he supported, not only with his influence, but with his purse. There were other mathematicians descended from David of Kinairdy, who, it may be remembered, had three sons professors of mathematics at one time, and of this branch of the family also were Alexander Innes and Thomas Reid, both professors of philosophy.

Reverting to the descendants of Professor James Gregorie —the son, grandsons, great-grandson, and great-great-grandsons, were founders or builders, all of them of medical education in Scotland, each doing his own part for the cause of medicine. James the son, called the third professor of that name (for one of his mathematical cousins was the second), was recognised and honoured as 'the founder' of the Medical School at Aberdeen, though the foundations indeed must lie very deep, for by no amount of digging can traces of them be discovered. Professor John the grandson (his half-brother, Professor James the fourth, was inconsiderable), the fellow-worker with Cullen,

accepted and taught that great doctor's views, and with his charming good-sense eradicated many of the more prejudicial items of children's upbringing. The great-grandson, Professor James (the fifth), more than took his father's place as a teacher, and setting the medical world of Edinburgh at defiance, made one of the most sweeping reforms that has ever taken place in the history of clinical teaching in that university. He was also one of the great leaders in the volunteer movement. The great-great-grandsons, Professor William Gregory and Professor William Pulteney Alison, were professors both of them in the Medical Faculty of the Edinburgh University, and taught their subjects in the lucid and original way, which was the gift of the whole family. Duncan Farquharson Gregory was the only one of the descendants of James Gregorie, the great contemporary of Newton, who followed in his footsteps as a mathematician. He died in his thirtieth year, but left behind him a brilliant record of his life's work, which is only sad because it was so short.

These Gregories, though they did not care for popularity, or possibly because they did not care for popularity, and never went out of their way to attain it, usually ended by being on the winning side—that is to say, public opinion often changed from being against them to being with them. They had such a gift of laughing at the right time, of passing over the bitterness of their adversaries, and even exposing the partisanship of their allies. Take the story which Sir Archibald Alison gives us in his autobiography, of how a mathematical examination was once rearranged for his benefit in the University of Edinburgh. It was in the time of Professor Leslie, in the spring of 1808, that this examination in the class of mathe-

matics took place. Archibald Alison had three very able competitors. These were Borthwick of Crookston, J. M'Pherson Macleod, and Mr Edward Irving. Young Alison, nervous and excitable in face of the examination paper, became suddenly destitute of ideas, and could only solve two of the six problems which were set. It was all the more distressing, because he knew that, being by his mother a member of the great mathematical family of Gregories, he was expected to come out first. The wretched day came to an end at last, and the boy went home in the evening literally shedding tears of vexation. Immediately he was freed from the anxiety of the lecture-room, he solved the problems rapidly and clearly, in a way that annoyed and pleased him almost equally. The professor, it seems, when he read the papers, could not give the first prize to Alison on the strength of his answers. He therefore decided that the work of that day should not hold, and appointed a second date for the trial. The next time the result was all that he and Archibald Alison could have desired! This little episode entertained Sir Archibald immensely, and is a curious indication of the lengths to which their friends were prepared to go for them, but while in many families, influence, however acceptable it may be to themselves, is anything but a good to the community, the influence exerted for the Gregories was always rewarded by the sensible, thorough, and often brilliant way in which they carried on their work.

The members of the family, who took up the study of medicine were great healers, but how large was their idea of what that word meant! To cure the body or to fail in curing it was one thing, but to get at the reasons of illness

in the circumstances and troubles of the patient, to take away the effect through taking away the cause, was ever the Gregories' way. They understood many an unspoken heart history, and from their own strong natures gave both strength and comfort to the sick. It is no wonder then to see Burns clinging to the friendship of his great physician for support and for love, knowing it was to be found in 'that man of iron justice, who was made without compassion for a poor poetic sinner.' Nor it must in truth be added, was Dr Gregory any less severe with unpoetic sinners. For there is a case recorded when a great aldermanic magnate came to consult him from the west country, expecting his case to be considered as one of grave importance and significance. What was then his surprise, when he was shortly but critically surveyed by the doctor, and shown out of the consulting room with directions equivalent to this: 'Have nothing richer than roast mutton and rice pudding for dinner for the next three months, and then if you care to let me have the pleasure of seeing you again, you will be a different man'—a transformation which the doctor evidently thought very desirable!

One can see that life could never be smooth to such a man. But at least the Gregories in all the struggles of life, in the riots of tongues, were ever sure of love and quiet by their own fireside. That came to them because they were such great lovers, just as the difficulties outside came from the same strong natures seeking their own way too much. It has to be remembered in connection with this that they were usually right, but that does not make the contest any less bitter. If one could only think of them as having had peaceful lives, as Thomas Reid at least had, but it was always a struggle, if not

a battle with them till the pale conqueror came to still the hubbub for ever.

They were great men, no mere dreamers. They were workers with busy minds, to whom life was ever too short for the fulfilment of their plans, but death never came to them before they had earned their rest.

All the great universities of this country who received the teaching of the Gregories, have felt themselves honoured by their service, and have adorned their annals with their name.

THE END.

Wellcome Library
for the History
and Understanding
of Medicine

INDEX

ABERDEEN, University of, 52, 92.
ABERDEEN, Grammar School of, 27, 52, 92, 100, 125.
ALISON, Sir Archibald, 155, 156.
ALISON, William Pulteney, 122, 124, 143, 155.
ANDERSON, David, of Finzeach, 10.
ANDERSON, Janet, 10, 26.
ARBUTHNOT, Dr, 68, 72, 73, 74.

BEATTIE, 109, 119-21.
BURNET, Bishop, 27, 65.
BURNET, Helen, of Elrick, 99.
BURNET, Mary, 32.
BURNS, 129, 133, 134, 135, 157.

CANAAN LODGE, 136, 150.
CAMBRIDGE UNIVERSITY, 70.
CANT, Andrew, 12, 13, 153.
CARLYLE, Alexander, 103, 104, 116.
CHALMERS, Principal, 98, 100.
CHARLETT, Dr, 64, 65, 71.
CRICHTONS, The, 13-18.
CHRISTCHURCH, 78, 82, 83, 126.
CHRISTISON, Sir Robert, 128, 130.
CLERK of Penicuik, quoted, 71.
COCKBURN, Lord, 128, 132.
COLLEGE, Royal, of Physicians, 137.
COLLINS, John, 28, 29, 31.
CULLEN, 101, 111, 113, 114, 115, 122, 126, 127, 130.

DRUMOAK, 10, 11, 14.

EDINBURGH ACADEMY, 147.
EDINBURGH, University of, 49-53, 55-58, 84, 85, 86, 92, 100, 113, 114, 115, 126, 127, 128, 130, 139, 145, 147, 149.

FLAMSTEED, 59, 68, 69.
FLANDERS, 93.
FORBES, Catherine of Monymusk, 98.
FORBES, Hon. Elizabeth, 107, 111, 117.
FRENDRAUGHT, Viscount, 15, 16, 18.

GALILEO, 29, 30.
GALTON, 10.
GEORGE, Prince, of Denmark, 68, 69.
GORDON, Isabel, 23, 25.
GREGORIE, Alexander, 14, 15, 16, 17, 20.
GREGORIE, Charles, 89.
GREGORIE, David, of Kinairdy, 19-25, 153.
GREGORIE, David, 89-91.
GREGORY, David, Sav. Prof., 52-76, 77, 154.
GREGORY, Dean, 77-83, 154.
GREGORY, Dorothea, 115, 122, 123, 124.
GREGORY, Duncan Farquharson, 147-151, 155.
GREGORIE, Prof. James, I., 27-51, 53, 153.
GREGORIE, Prof. James, II., 84-87.
GREGORIE, Prof. James, III., 93-99, 154.
GREGORIE, Prof. James, IV., 98, 99.
GREGORY, Prof. James, V., 82, 122, 125-140, 155.
GREGORIE, John, Rev., 11-14, 153.
GREGORY, Prof. John, 100-124, 125, 154.
GREGORY, Philip Spencer, 22, 124, 127.
GREGORY, Prof. William, 141-147, 155.
GREY, Lady Mary, 81.

Halley, 60, 64, 65.
Hamilton, Professor, 136, 137.
Hearne, quoted, 63, 65.
Holland, 19, 24.
Hudson, 64, 65.
Hume, David, 109, 116, 119, 120.
Huygens, 29, 34, 35, 50.

Infirmary, Royal, of Edinburgh, 136, 137.
Innes, Prof., 23.

Jameson, George, 33.
Johnson, Samuel, 69, 108.

Keill, 62.
Kelvin, Lord, quoted, 151.
Kinairdy, 13, 14, 20, 21, 22, 24, 84.
King's College, Aberdeen, 20, 24, 96, 97, 98, 100, 105, 108, 109, 112, 126, 142, 143.

Leyden, 102, 103, 104, 127.
Liebig, 142, 146.
Lyttelton, George, 107.
Lyttelton, Lord, 112.

Macgregors, The, 9, 152.
Macgregor of Roro, 9, 89.
Mackenzie, George, 18.
Maclaurin, Colin, 76, 86.
M'Leod, Isabella, of Geanies, 132.
Mallet, David, 87, 89.
Marischal College, Aberdeen, 27, 86.
Monboddo, 112, 135.
Monro, Professor, Primus, 100, 101.
Monro, Principal, 58.
Montague, Mrs, 107, 108, 115, 116, 123.

Newton, Sir Isaac, 23, 29, 34, 50, 54, 59, 60, 64, 68, 70, 86.

Oliphants of Langton, 61, 87.
Oxford, University of, 58, 61, 63-67, 78, 79, 80.

Padua, 30, 32.
Pennant, quoted, 152.
Pepys, Samuel, 65, 66, 67.
Pitcairne, Dr Archibald, 53, 58, 70, 84.

Regents, 105, 106.
Reid, Prof. Thomas, 23, 25, 90, 91, 106, 109, 119, 130, 131, 132.
Rheims, 93.
Robertson, Principal, 102, 116, 132.
Rob Roy, 94, 95.
Royal Society, 31, 32, 60, 61, 68, 107.
Rutherford, Professor, 101, 111, 112, 113.

Scott, Sir Walter, quoted, 95, 100, 139.
Shelburne, Earl of, quoted, 79, 83.
Sherborne Hospital, 80, 81.
Sinclair, Prof. George, 35, 36, 42.
Skene, Alexander, 47.
Skene, David, 108, 109.
Skene, Robert, 52.
Smalridge, Dr, 64, 75, 76.
Society, Royal Medical, 101.
Spalding, quoted, 12.
St Andrews University, 33, 44-49, 84, 85, 89.
Stewart, Dugald, 130, 132.

Telescope, Achromatic, 62.
Telescope, Reflecting, 28, 29, 31.
Trinity College, Cambridge, 148.

Union Negotiations, 70-73.

Walker, Jean, of Orchiston, 19, 23, 52.
Wallis, Dr, 31, 64, 67.
Westminster School, 77, 78, 83.
Whiston, quoted, 54, 60.
Wilks, 103.
William and Margaret, 87, 88, 89.
Wise Club, 109, 110.
Witchcraft, 21.

NEMO ME IMPVNE LACESSIT